Digitized by the Internet Archive
in 2016

https://archive.org/details/journalofindiana72unse

INDIANA STATE MEDICAL
ASSOCIATION. JOURNAL

January 1979 • Vol. 72 • No. 1

The JOURNAL

OF THE INDIANA STATE MEDICAL ASSOCIATION

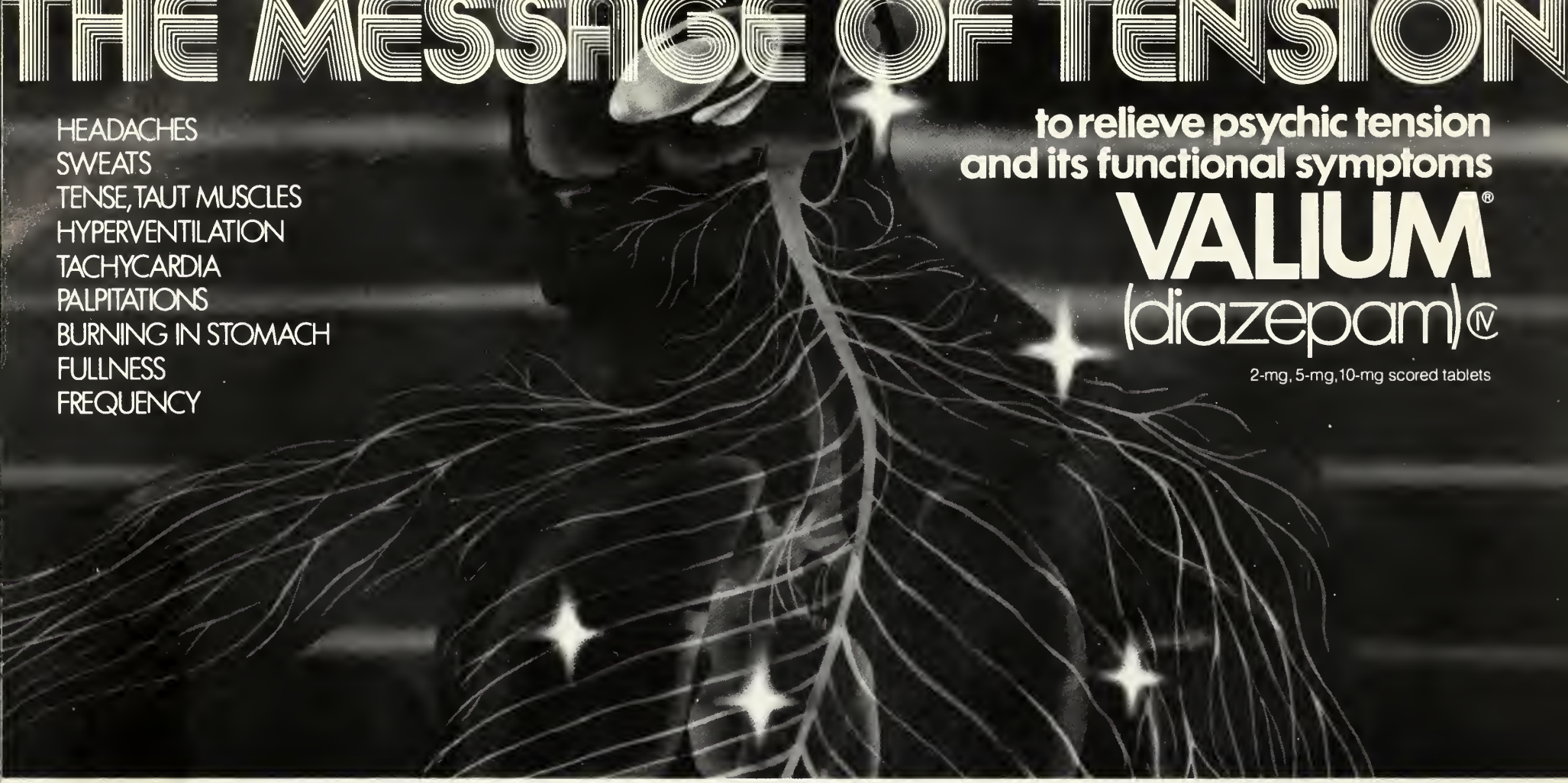


U. of Calif., San Francisco
SAN FRANCISCO, CA 94143

LIBRARY
U.C. SAN FRANCISCO
FEB 5 1979

INSIDE:

DIVERTICULITIS...
Another installment in the Continuing Medical Education Series



VALIUM®(diazepam)

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predispos-

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley, New Jersey 07110



In Memoriam

James A. Harshman, M.D.
1930-1978

President
Indiana State Medical Association

Dr. James A. Harshman, installed as the 136th president of the Indiana State Medical Association during the annual convention in October, was killed in a automobile accident east of Lafayette Monday, Dec. 11.

Dr. Harshman, 48, was a Kokomo pathologist who received his M.D. degree in 1955 from the Indiana University School of Medicine. He served his internship and residencies in anatomic pathology and clinical pathology at the Indiana University Hospitals. Soon after, he served as a clinical fellow of the American Cancer Society and resident instructor in pathology at the I.U. School of Medicine.

He was commissioned in the U.S. Naval Reserve Medical Corps in 1956 and served on active duty at the U.S. Naval Hospital, Great Lakes, Ill., from 1960-62.

Certified by the American Board of Pathology in anatomic pathology and in clinical pathology, Dr. Harshman had been pathologist of St. Joseph Memorial Hospital and Howard Community Hospital, Kokomo, since 1962. He was also certified by the American Board of Nuclear Medicine.

Dr. Harshman, a member of the Howard County Medical Society and the Eleventh District Medical Society, was an ISMA delegate to the American Medical Association. He was a fellow of the College of American Pathologists and a fellow of the American Society of Clinical Pathologists. He also was a member of the American Association of Blood Banks, the American Society of Cytology and the Society of Nuclear Medicine.

Dr. Harshman served as a trustee of ISMA from 1972-77 and was chairman of the Board of Trustees from October 1976 to October 1977. He also was a member of the ISMA Executive Committee. In addition, he had served on numerous advisory councils and liaison groups with many medical and paramedical organizations.

Dr. Harshman had been very active in the community. He had been a director of the Kokomo Area Chamber of Commerce, director of the Howard County Red Cross, director of the Howard County Cancer Society, a member of the Kokomo City Planning Commission, and a member of the Mayor's Task Force on Drug Abuse.

He was honorary speaker of the House of Representatives of the Indiana General Assembly in 1972 and was made a Sagamore of the Wabash in 1976.

Dr. Harshman was born in Tippecanoe County near Dayton, Ind., and was graduated from Dayton High School in 1948. He is survived by his wife Eva and their five children, all of Kokomo.

Memorial contributions may be made to the St. Joseph Hospital Foundation, Kokomo, Ind. 46901.

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis



AMONG THOSE RECEIVING the M.D. degree at the first graduation exercise of the Indiana Medical College in 1869 (Medical Museum Notes, May, June and July 1978) was Dr. Phineas George Hunt. Dr. Hunt's M.D. degree was an honorary degree, an honor that he well deserved.

The year 1979 will mark the 100th anniversary of formal dental education in Indiana, the observation and celebration of which will in large measure be a tribute to Dr. Hunt, a principal founder and first dean of the Indiana Dental College.

Phineas Hunt was born June 16, 1827. At the age of 19 he commenced an apprenticeship in dentistry, and two years later he was in practice. He was one of the founders of the Indiana Dental Association in 1858 and its third president in 1861. He was one of the original founders of the American Dental Association in 1859 and president in 1872. He was active in passing the first dental law in Indiana, and in forming the Indiana Dental College in 1879. In addition to being the School's first dean, he was also the first president of the State Board of Dental Examiners. His D.D.S. degree was also honorary (from the Ohio College of Dental Surgery). Dr. Hunt died in 1896.

The Indiana Dental College remained in continuous operation until 1924, occupying four different buildings during this period of time. In 1924 the School became the Indiana University School of Dentistry.

Shown on this page is a photograph of Dr. Phineas George Hunt, and a full-scale reproduction of a 1904 advertisement of the Indiana Dental College from a book recently donated to the Museum, entitled *Physicians' and Dentists' Directory of the States of Indiana and Kentucky* (Galen Gonsier Publishers, Chicago).

Indiana Dental College

Department of Dental Surgery of the University of Indianapolis

The twenty-sixth annual session of the Indiana Dental College began October 4th, 1904. The College occupies its own building in the center of the city, with ample boarding facilities close at hand. The faculty is the result of years of selection. Five of its members devote all of their time to dental teaching and the results obtained are much more satisfactory to the student than in those schools where teaching is merely an incident in the life of the members of the faculty. The course is graded and every possible facility offered for acquiring a thorough knowledge of theoretical and practical dentistry. The equipment is complete and ample. A compressed air outfit, electrically driven lathes and all modern conveniences are in use. The cost of living in Indianapolis is less than in large cities, an item to be considered There are 225,000 people within a half hour's ride from the college, so the clinics are large and varied. Our students come from all over the United States. A booklet telling about the College will be sent upon application to :: ::

INDIANA DENTAL COLLEGE

131 East Ohio Street, Indianapolis, Indiana

STRATEGIC FINANCIAL PLANNING EXPANDS YOUR HORIZONS



Many health care professionals have discovered an excellent plan to create capital for a variety of uses.

Could you use $10,000 to $100,000+? Take your assets out of limbo and convert them into cash through our sale/leaseback program. Hempel Financial Corporation will buy your office equipment and lease it back to you for payments that are **100% tax-deductible**. Your bank relationships and lines of credit are not affected, and all transactions are strictly confidential. Hempel has virtually unlimited funds to meet the needs of physicians and dentists nationwide. For your free brochure describing our sale/leaseback program, as well as our other financial plans, **call toll-free (800) 421-7177; in California, call collect (213) 475-0304.**

HEMPEL
FINANCIAL CORPORATION
10880 Wilshire Blvd.
Los Angeles, CA 90024

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION (USPS 284-440)

Volume 72—January 1979—Number 1

Contents

SCIENTIFIC ARTICLES

39 **Diverticular Disease of the Colon**—*John E. Jesseph, M.D.*
(13th Continuing Medical Education article)
43 **Nicotine Addiction: Treatment with Medical Hypnosis Part 3**—*Hanus J. Grosz, M.D.*
46 **Clinical Notes: Dermatology**—*Jere D. Guin, M.D.*
51 **Infiltrative Keratitis**—*Robert H. Michaels, M.D.*
57 **CME Pre-Test**

EDITORIALS

6 **Readership Survey**
6 **Preventing Mental Retardation**
8 **Editorial Notes**
15 **Robin Hood and Black Beard Were Pikers**
16 **Hidden Impact of the Malpractice Problem**

SPECIAL FEATURES

12 **Commentary: The Best Way to Destroy a City**
14 **White House Message on Inflation**
23 **Memorandum: Public Law 135—Child Abuse**
24 **ISMA Board Actions**
26 **Controlling Hospital Costs in Indiana**

DEPARTMENTS, MISCELLANEOUS

2 **Medical Museum Notes**
16 **Cancer Corner**
18 **As I See It (IMPAC)**
30 **Auxiliary Report**
35 **Tax Tips**
47 **What's New?**
56 **Book Reviews**
60 **Future File**
62 **News Notes**
68 **Obituaries**



ABOUT THE COVER

Winter fun at Pokagon State Park in northeastern Indiana includes skiing, ice skating, ice boating, tobogganing—and even snowmobiling. The park is located on U.S. 27 and I-69 near Angola. PHOTO COURTESY INDIANA DEPARTMENT OF COMMERCE

EDITORIAL AND ADVERTISING INFORMATION

All articles must be typewritten, double-spaced with margins of one inch.

Photographs should be printed on glossy paper. Negatives cannot be used.

Illustrations are desirable. Selection of illustrations submitted at discretion of editor and editorial board members.

Contributors are responsible for all statements made in their articles. The editors and editorial board members may not be in agreement with all views expressed by authors, but it is desired to give all authors as great latitude as possible.

Articles are accepted for publication with the understanding that they are submitted for exclusive publication.

Advertising rates will be furnished on request. Copy must be received by the 1st of the month preceding month of issue.

Representative for national advertising is the State Medical Journal Advertising Bureau, 711 South Blvd., Oak Park, Ill. 60302.

Annual subscription rates: ISMA members, $8, included in annual membership dues; ISMA senior members, $10; Libraries, $12; all others, $14. Additional postage: Canada and PUAS countries, $2; Foreign, $3. Subscriptions are renewable in July and January.

Entered as second class matter January 25, 1933, at the Postoffice at Indianapolis, Indiana.

THE JOURNAL of the Indiana State Medical Association (USPS 284-440) is published monthly by the Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Ind. 46208. Second-class postage paid at Indianapolis, Ind., and at additional mailing office. No copyright is claimed.

All issues of 1967 and subsequently may be obtained on microfilm. Address The Journal for details.

Our International Standard Serial Number is ISSN 0019-6770.

Indexed in Index Medicus and Hospital Literature Index.

Six important reasons why physicians are selecting the Reality® Medical Management System.

1. Improved Cash Flow. Timely patient statements which reflect the detailed account status of charges, payments and aged account balances contributes to faster payments and a reduction of bad debts.

2. Totally Automated Insurance Processing. The **Reality** Medical Management System has incorporated the processing of Medicare, Medicade, Blue Cross, Blue Shield and most other third party payors into the automatic billing and insurance claim reporting function, thus, eliminating clerical time, errors and lost charges.

3. Direct Control. No reports, no files, no charge tickets leave your office. Your personnel, who know your method of operations, communicate directly to the computer based system via a video display terminal. Everything is processed according to your schedule and in a manner which fits your Doctor to Patient relationship.

4. Improved Practice Control. From the management reports and practice statistics, your practice can be managed in ways which will more effectively utilize the resources of the practice, thus, generating a better return on your total investment.

5. Better Patient Care. Research by diagnosis can lead to better patient care. The System maintains data by patient, by procedure and by diagnosis, whereby, retrieval and analysis can provide historical treatment histories. Better patient scheduling by the System makes for better patient relations.

6. Communication With The System In English. Unlike other automated systems, the **Reality** Medical Management System is under your direct control (not through a programmer) in a common language used by human beings — known best as **English**. If you can type, you can talk to the System.

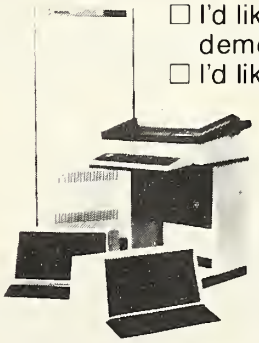
Take A Good Look At Reality. Call Anacomp or send in the coupon today for a free hands-on demonstration. Within 15 minutes you'll know all you need to know about choosing a computer.

Microdata

Attach your business card and send to:

Anacomp
4755 Kingsway Drive
Indianapolis, Indiana 46205

For immediate response, call **317/257-1426**



Show me.

☐ I'd like a free hands-on demonstration of Reality.

☐ I'd like more information.

EDITORIALS

Editorial Notes . . .

CONTINUED FROM PAGE 6

New York VA Medical Center. Both gadgets are designed to salvage heat which ordinarily goes to waste. The sun-tracking solar collector will provide steam at 120 pounds psi. The heat retrieved from flue gas in New York will be used to heat boiler water, for other hospital use, and will be also used to heat incoming fresh air.

Ford Foundation has announced grants totaling $1.5 million for projects aimed at furthering the development of new contraceptives. The Foundation has committed more than $225 million over the past 25 years to programs aimed at limiting fertility. The present research is almost entirely in the category of pure research but the long range goal is the discovery of a contraceptive process or processes which are effective, inexpensive and safe. Not mentioned in the Ford release is the obvious fact that contraception, if it is destined to limit the world population to a size that world food production may support, must be reduced to a method which is universal in its acceptance. All classes of the human race must limit reproduction or else the world will be inherited by a race of unintelligent beings not capable of managing anything except reproduction.

Chlorinated dioxins, one of the most toxic chemicals known, have until recently been thought to result only from manufacture of pesticides and herbicides. Dow research, while searching for the source of one of the dioxins in fish, has demonstrated that dioxins result from almost any type of combustion and have probably been a part of our environment since the advent of fire. Advances in analytical chemistry have made the compounds recognizable but there is no cause for alarm, according to the researchers.

Upjohn research in animals supports the theory that individuals genetically predisposed to diabetes should limit their diets before symptoms appear. Chinese hamsters whose genetic background guarantees that they will develop diabetes were fed limited diets and did not develop the disease. Their siblings who ate unlimited diets became diabetic.

The Federation of American Hospitals has announced publication of the 1978 Directory of Investor-Owned Hospitals and Hospital Management Companies. During the past year the number of hospitals owned by management companies has increased 4.5%. This accounts for an additional 2,344 beds, a 5.7% increase. There are now 986 investor-owned hospitals in the U.S., for a total bed count of 108,632.

Almost $40 per day is added to hospital bills as a result of compliance with government regulations, according to a letter to the editor of the INDIANAPOLIS STAR. The writer acquired this information from "The Weekly Underwriter," an insurance newspaper that was reporting information it had obtained from the New York State Hospital Association. The figure reported is approximately 25% of the daily room charge. The article further noted that there are 164 regulatory agencies in the State of New York. This might explain why each registered nurse there spends more than one day a week just filling out government forms.

A New York State law passed in 1978 requires the physician who will be in attendance at the birth of a child to inform the expectant mother in advance of the birth, of drugs (1) that such physician expects to employ during pregnancy, (2) of the obstetrical and other drugs that such physician expects to employ at birth, and (3) of the possible effects of such drugs on the child and mother.

The Veterans Administration is adding 15 new medical programs for treating veterans with alcohol problems. This brings to 93 the number of locations where specialized help is available. The VA Alcohol Dependence Treatment Program emphasizes a relatively short hospital stay followed by several months of outpatient visits, with strong recommendations toward Alcoholics Anonymous.

The length of life in the United States increased again in 1977, reaching an all-time high of 73 years. Both sexes shared in the gains. Expectation of life at birth increased to 69.2 for newborn males and to 76.9 for females. This represents a gain of 13.8 years since 1929.

United Auto Workers President Douglas Fraser is quoted as saying that passage of National Health Insurance will be "one of the most difficult legislative fights ever." His reason: Union members are not interested since most of their medical costs are paid by third parties. However, he says: "If NHI became a reality, and unions need not bargain for health care, they could push harder for other monetary demands." This explains a lot.

A lightweight cardiac pacemaker developed in Australia is now available for use in England. It weighs 58 grams and is small enough for implantation in small children. The most recent report of its use involved a 9-month-old infant.

n pharyngitis and tonsillitis

...prompt temporary relief of pain even before patients leave your office.

CĒPASTAT®
mouthwash/gargle/sore throat lozenges

Merrell

n Anesthetic iveness

the throat with CĒPASTAT oothing relief within minutes. ients will appreciate this relief iting for therapeutic measures old. The well-established ic effects of CĒPASTAT pro- thing temporary anesthesia to ted or inflamed oropharyngeal

STAT in your nent room . . .

a spray, CĒPASTAT is more deliver the most relief to the rea of the throat.

Suit the product to the patient . . .

The liquid is best for use at home as a spray or gargle. Lozenges are ideal for patients on the go.

A recommendation is best . . .

It costs less. Keeps the emphasis where you want it . . . on more important counter-measures — your prescription for anti-infectives, for example.

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

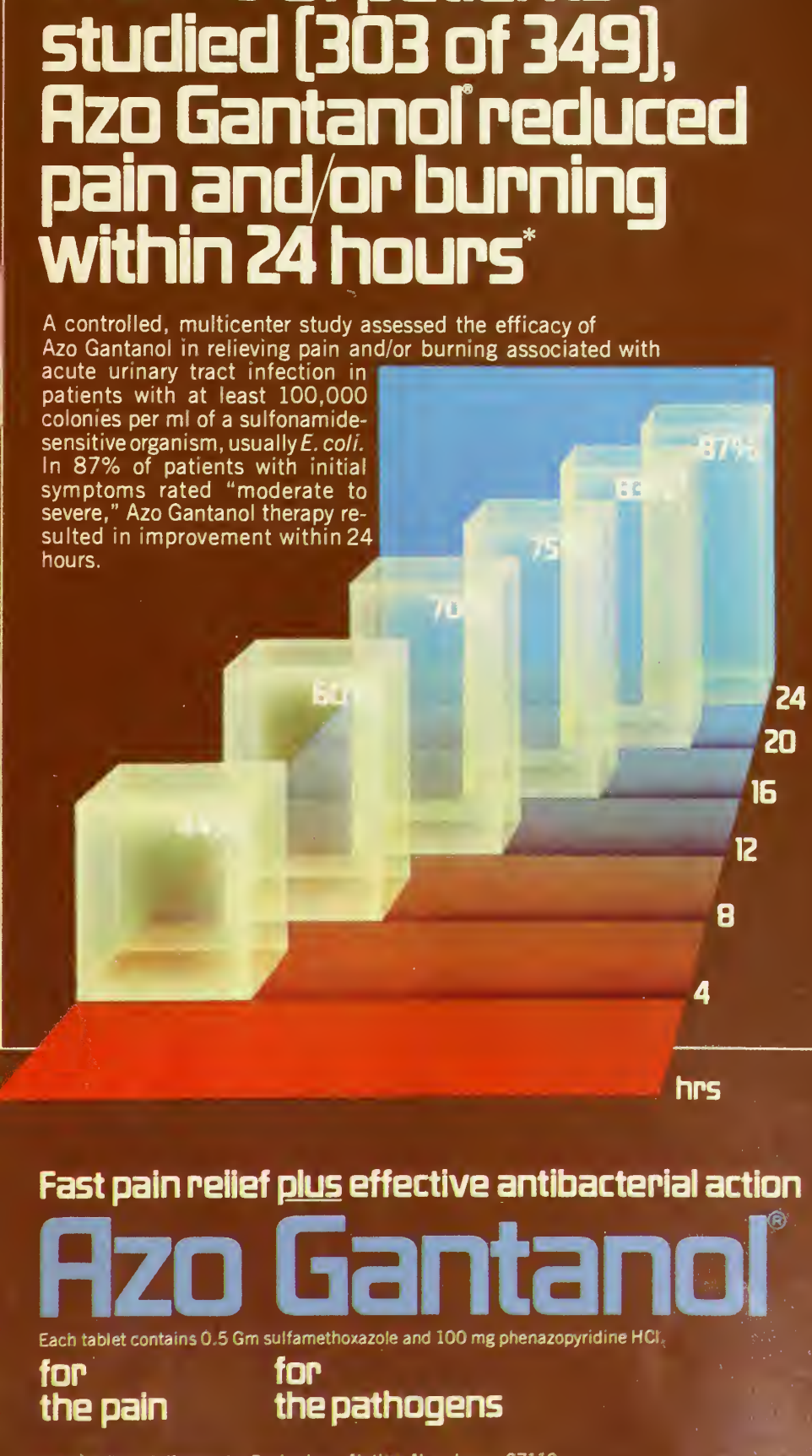


relief of minor sore throat when patients want it . . . *stat*

Important data on the pain of acute cystitis:

In 87% of patients studied [303 of 349], Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain

for the pathogens

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note fully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. p-aminobenzoic acid to follow-up culture reports. Because increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides.** Measure sulfonamide blood levels; variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term; during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatic disease, uremia, and pyelonephritis of pregnancy; severe renal disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent complete urinalysis with microscopic examination and blood counts recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy or bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypothrombinemia and methemoglobinemia); *hypersensitivity reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pain, hepatitis, diarrhea, anorexia, pancreatitis, glossitis, stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, crystalluria, nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogenic agents, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the relief of painful phase of urinary tract infections. Usual *adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continue treatment with Gantanol (sulfamethoxazole) should be considered.

NOTE: Patients should be told that the orange dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and

ROCHE

Roche Laboratories
Division of Hoffmann-La R
Nutley, New Jersey 07110

Guest Editorial

Hidden Impact of the Malpractice Problem

JAMES Y. McCULLOUGH, M.D.
New Albany

The malpractice problem is neither conducive to quality medical care nor to cost containment. These two terms much used by the proponents of federal medicine supposedly make acceptable whatever proposal may follow.

Nevertheless, the government must consider medical costs since it pays for one-third of all medical care—Medicare, Medicaid and other federal aid and grants.

The taxpayer ordinarily thinks that malpractice suits affect only doctors and insurance companies. Not so! Contrary to popular opinion, the cost of medical care in this country has increased with the costs of malpractice insurance to the hospital and its staff members.

The increase in cost of medical care to the patient is not simply that of the phenomenal increase in the insurance premiums paid by the hospital and each professional staff member, although this is significant. First, compare for a moment. The premium for recommended protection in event of a malpractice suit in 1950 was less than $100 per year. The same insurance coverage today has skyrocketed to $4,000. From the cost of each hospital bed $10 daily goes to pay for the hospital malpractice insurance premium. These costs have increased directly with the number of suits and amount of the judgments.

The major additional expense of health care directly related to malpractice suits is the defensive practice of medicine.

This unhealthy and extremely expensive facet of the cost of medical care crept in as the malpractice threat increased. It includes both hospital and physician, but chiefly the physician. It requires more employees, more paperwork and more equipment to appease the litigious-minded public.

Unwittingly, the physician is the chief offender of this abominable practice, and though he seeks to minimize it, he is subconsciously guilty.

He is gradually induced to prescribe more and more diagnostic tests and examinations, some excessive in numbers, some in repetition, and some related only peripherally to the case. All are expensive. For example, everyone with a bump on the head gets a skull series. This routine smothers our efforts to discriminate the needs of each patient.

In the same category and carrying the highest price tag is the pressure to increase hospitalization to avoid overlooking any complications. The belabored doctor, acquiescing and hoping to avoid a hiatus in the care of his patient, postpones dismissal for a day or two to wait and see if the patient may need other tests.

Understandably, some physicians will persist in this practice as long as the public demands that they be perfect.

The ever-present threat of malpractice suits eventually adds a non-productive cost of medical care affecting patient, doctor, hospital, health insurance company and taxpayer. Inflation has inflamed this sore.

I submit there is a better way, but first, reason must prevail; and in this supposition, I may not reckon with the way of men.

One, the bar association, as in Great Britain, must officially frown upon this practice except in instances when a competent board of inquiry determines its justification.

Lawyers who accept these suits, on a contingency basis and without assuming responsibility for their allegations, do harm to both their clients and their profession. They play the role of solicitor rather than of barrister.

The medical protection insurance company often settles cases out of court to save money.

Possibly the accused could be given the right of trial by tribunal. A judge, weighing evidence presented by representatives of the patient, the physician and the public, would decide the issue. The judge would consult with peers of the accused and other qualified sources. Arbitration would be mandatory unless criminal intent was involved.

Until this or some more profound change does occur, I have little hope that present abuses will fade.

The ease of suing, the rewards of settling out-of-court, and the promise of receiving large awards in-court will continue to foster this abysmal practice.

Commentary

The Best Way to Destroy a City

RICHARD L. LESHER
President
U.S. Chamber of Commerce



Those who advocate rent control carefully rationalize their behavior as being "for the protection of the poor." They will therefore doubtless be upset when I say that rent control is actually a conspiracy to steal from the landlord and the homeowner for the benefit of the tenant. But theft is theft, and I see no point in sugar-coating an ugly truth.

It is a myth that rent control benefits the poor. It benefits those with stable jobs and families, who are most likely to be in the middle and upper-middle classes. The situation occurs for two reasons.

Under the usual practice in rent-controlled areas, the income of the tenants involved is not considered. Such procedures are "too complicated" to administer.

And, in a lame attempt to prevent landlords from going bankrupt, rents are usually permitted to rise to market levels when an apartment becomes vacant.

Thus, those who have just arrived, or who have a frequent need to move, do not benefit to the extent of those who can afford to stay put. And the poor are often in the first two categories.

Another argument that sounds plausible on the surface—"there's a shortage of housing, so emergency measures are justified"—also falls apart under analysis. Nothing will worsen a shortage of housing faster than rent control.

To see why, you have to put yourself in the position of a potential landlord:

You are not necessarily rich, but you do have a small nest egg to invest. How will you choose to invest it? There are many, many possibilities.

You could put it into a bank or into government bonds, and accept a lower rate of return in exchange for greater security. You could put it into stocks, or try to start your own business, taking a greater risk and hoping for a bigger return. Or, you might use your capital to put up an apartment building, thus helping to relieve the housing shortage.

So you examine the possibilities and find that you could get an annual return of 5.5% from a bank, 7.5% from a savings & loan, maybe 8-10% in the stockmarket, with luck. But a landlord's rate of return in your area is limited to 5% and tenants' groups are protesting that. Now, where are you going to put your savings?

(The actual return a landlord receives depends on many factors, and will of course vary from one individual to another. Rent control formulas are also both highly individual and highly complicated. The point, however, is this: What the city council or some tenants' group thinks is "fair" is irrelevant. If investors are not willing to put their money into new apartments, then the return—whatever it is—is too low.)

The nation's glaring example of rent control folly is New York City, which still has many of its WWII controls. In the 1970s, more than 50,000 residential units in the once-prosperous South Bronx were burned or abandoned. The area looks as though it has been bombed, and indeed, one expert quoted in the August issue of NATION'S BUSINESS has called rent control "the most efficient technique presently known to destroy a city—except for bombing."

What about the effect on homeowners? Simple. When the value of apartment property deteriorates—which it does if the return is no longer attractive to investors—the tax revenues flowing to government from that property also drop.

As the National Association of Realtors points out, in 1976, "the assessed value of multifamily rental dwellings increased by about 6%. However, the assessed value of single-family properties showed a 40% increase in that one year.

"Obviously, single-family homeowners are being forced to absorb increased costs of city services through higher assessments while revenues from rental units are being artificially constrained because of lower values attributable to rent control."

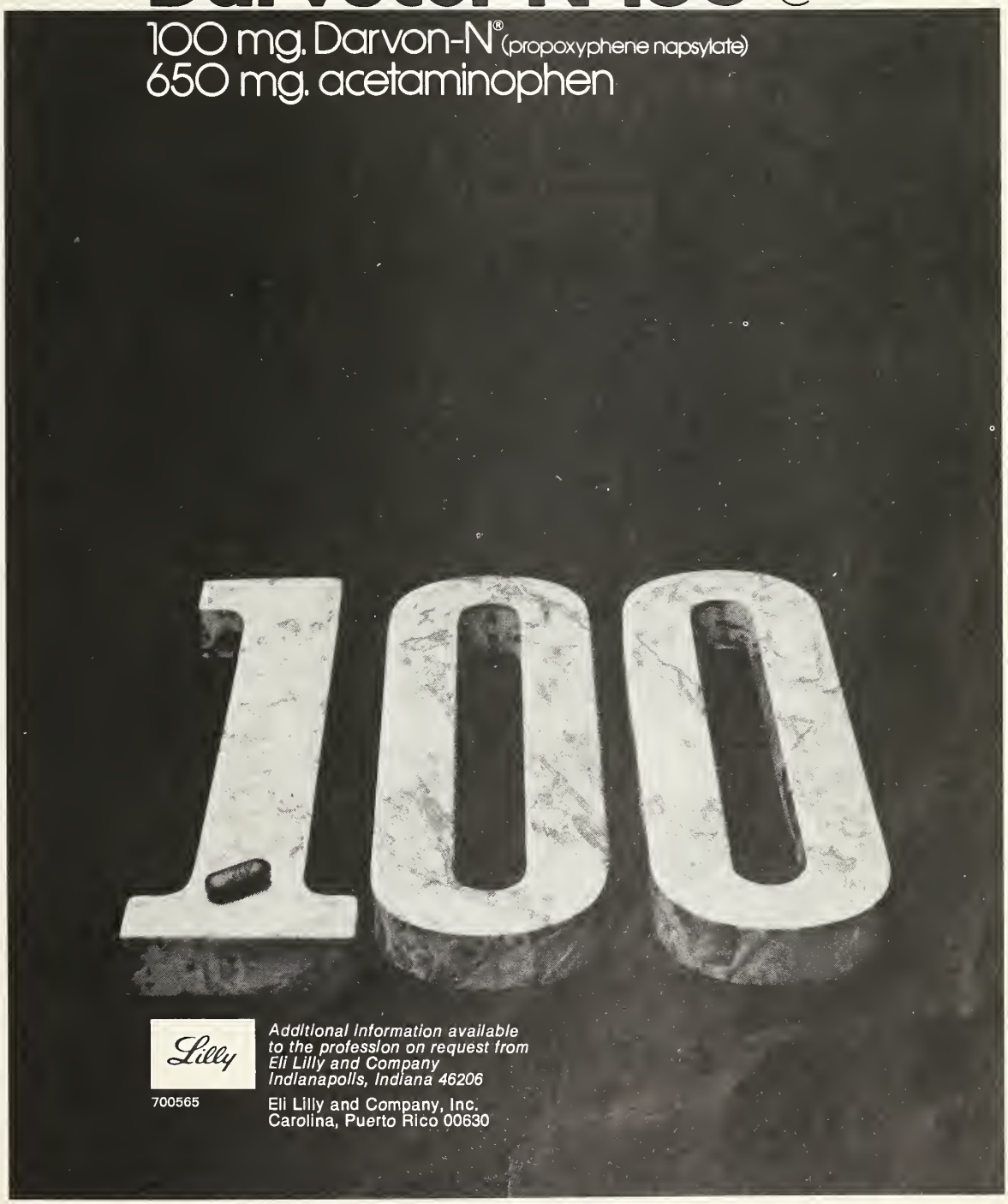
Rent control is perhaps the best example available of the inevitable futility of all government attempts to legislate wages and prices. But rent control is spreading. Why? Because tenants have more votes than landlords. And too many of the rest of us do not understand how the world works.

contains no aspirin

tablets

Darvocet-N® 100 Ⓒ IV

100 mg. Darvon-N® (propoxyphene napsylate)
650 mg. acetaminophen



Lilly

Additional information available to the profession on request from Eli Lilly and Company Indianapolis, Indiana 46206

700565

Eli Lilly and Company, Inc.
Carolina, Puerto Rico 00630

THE WHITE HOUSE

WASHINGTON

Dear Association Member:

President Carter has described to the American people his program for combating inflation, our most pressing economic problem. He is absolutely determined to make it succeed.

The program has three major planks--monetary and fiscal restraint by the Federal Government; reduction in the government regulations and interventions that inflate costs and interfere with competition; and the cooperation of all Americans in accepting voluntary standards.

In addition, the President announced on November 1 a complete set of actions to defend the dollar.

But governmental action alone is not enough. Success requires everyone's support. The President has therefore issued explicit standards. He has asked that pay raises in the coming year be held to 7% or less, and that the rate of increase in prices be cut at least 0.5% below the average rate of 1976 and 1977.

Some people have called for mandatory wage and price controls. The President has rejected this alternative because of the bureaucracy, distortions, and unfairness that mandatory controls inevitably involve.

The President's program strikes a balance that offers our best hope of bringing inflationary forces under control without plunging us into depression or putting the whole economy into a bureaucratic straightjacket.

Will it work? Consider the consequences of it not working. The plan has to work; asking whether it will is somewhat like asking "will America work?"

The administration of the wage and price standards is going to take much development; there will be thousands of individual questions and situations that will need to be brought to the attention of the Council on Wage and Price Stability. I urge you to do so.

You can reach us by writing me at 726 Jackson Place, N. W., Washington, D. C. 20506, or by calling 800-368-9191, or, in Washington, 456-6766.

Sincerely,

Alfred E. Kahn
Advisor to the President
on Inflation

AMA Response

The President's Anti-Inflation Program

(The AMA has released the following statement responding to President Carter's new anti-inflation program and specifically to his wage and price standards and his comments on the hospital cap bill.)

The American Medical Association applauds President Carter's call for voluntary controls on wage and price standards as part of his new anti-inflation program. The Association has long believed that mandatory controls over any one part or the total economy only worsens the inflationary situation in the long run.

"However," said James H. Sammons, M.D., executive vice president of the AMA, "we are sorry that the President chose to single out the health care industry, and particularly hospitals, for mandatory controls at a time when that industry has been cited by his own Council on Wage and Price Stability as 'one of the very few industries in which deceleration has succeeded.'

"It would be more in keeping with the President's own white paper on inflation if he would allow the Voluntary Effort of the American Medical Association, the American Hospital Association and the Federation of American Hospitals sufficient time for its voluntary controls to continue the decline in escalation seen in the industry this year (1978). President Carter has told the American people that it will take time for his voluntary program to work. He should allow time for other programs to work before asking Congress for mandatory controls."

The AMA is looking at the details of the Carter anti-inflation proposal and is assessing its impact on the physician component of the health care industry.

Guest Editorial

Robin Hood and Black Beard Were Pikers

L. A. ARATA, M.D.
Shelbyville

When I was a child, I read about the legendary exploits of Robin Hood and his merry men of Sherwood Forest. They were outlaws one and all, and their exploits were presented as the work of an outlaw band. The same held true for the exploits of Black Beard and other notorious pirates who were the scourge of the Spanish Main. These were exciting adventure stories, and were presented as entertainment, but not for emulation.

Apparently, I was not the only one who read these stories. It seems that our future politicians also read them—and took them to heart. Change the personalities to our Congress; the locales from Sherwood Forest and the Spanish Main to Washington, D.C.; change the victims from the rich to all productive citizens; label the exploits "income redistribution"; redistribute the loot according to rigid formulae not based on need. Do all these things and you have USA 1978. It is remarkably like the stories. There is one big difference, though. Our politicians have taken a lesson from the farmers who can shear their sheep annually, but skin them only once. We are sheared annually by the income tax and withholding taxes. This has become too small a "take" by the "Pirates of the Potomac," so they have embarked on further robbery by means of inflation caused by deficit spending.

Let Proposition 13 become the banner around which productive and thoughtful citizens rally! Let the voters speak at the ballot box to rid the Potomac of its pirates, and the Sherwood Forests of our state capitals of their Robin Hoods—perhaps they should be called ROBBING HOODS.

WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

CANCER CORNER

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

Interferon: History, Present Status

What it is and does. Interferon is a protein substance secreted in very tiny amounts by animal cells. Since it helps the body repel virus attacks, it would be natural to try to stimulate the body to produce more interferon in the event of a viral invasion. Unfortunately, most of the substances that seem to stimulate interferon production by the body may be even more toxic than the viruses that interferon repels. Logically, then, to study what additional interferon might do to repel viruses in human beings, it became necessary to give interferon made outside the body of the patient.

Interferon is "species specific" in most cases: that is, if interferon is given to a human patient, it must come from a human source. Animal interferon has been produced for use in animal studies, but has no effect in people. Three types of human interferon have been identified. But only one—known as human leukocyte interferon, made from human white blood cells—has been extracted in sufficient quantity to be studied in patients.

Lack of material. Interferon research has suffered most from a lack of the substance; there has not been enough to do extensive clinical trials. One of the reasons for the dearth of material has been lack of interest in using it; commercial sources have looked into manufacturing interferon, but have turned away because not enough investigators were interested in the substance.

However, one scientist, Dr. Kari Cantell of Finland, has long had faith in the ultimate effectiveness of interferon therapy. For 20 years he has devoted himself to creating a process to extract and force cells to produce more interferon, and to purify it so that it can be given safely to human beings.

Working with the Finnish Red Cross, Dr. Cantell has developed a process for making interferon using the Finnish National Blood Bank as a source of white cells. Thus, he has created the only large source of supply of interferon in the world.

Extraction. Extraction is difficult, for the cells that make interferon have an automatic cutoff. It's necessary to short-circuit this in order to force them to produce more interferon. Even then, a large quantity of disease-free human white blood cells, along with very careful and expensive technology, and meticulous purification procedures are needed in order to produce interferon that can be given to patients. For these reasons the substance is in extremely short supply, and is very expensive. It costs about $30,000 to $50,000 to treat one patient with interferon.

As a natural body substance, interferon is theoretically non-toxic. But some toxicity has occurred in patients receiving it; this is thought to be related to impurities. Interferon can be stored under refrigeration, even frozen; it is given by intramuscular injection. Patients on long-term therapy have been able to keep the substance at home and treat themselves.

Virus treatment. Interferon was first investigated in human beings as a therapy against viral diseases, since this was its first known effective action. It has proved effective against such herpes viral diseases as herpes zoster (shingles) and chicken pox. It is also useful in treating viral hepatitis.

Interferon works best as a prophylactic —preventing the return of the disease. A form of cancer known as osteogenic sarcoma—a rapidly growing bone tumor —has been treated primarily with surgery. After the tumor is removed there is an opportunity to test whether interferon can prevent recurrence of osteogenic sarcoma better than other means. A Swedish investigator, Dr. Hans Stander, and his group have been conducting trials of interferon against osteogenic sarcoma for a number of years, and have found the treatment promising. Using interferon, surgeons have been able to remove only a portion of the leg bone, rather than being forced to do a complete amputation, with assurance that the patient will not be in danger.

An American investigator, Dr. Thomas C. Merigan, Jr., heads a group at Stanford University that has been studying interferon as a treatment for non-Hodgkin's lymphoma, a slow-growing cancer of the lymphatic system. Although Dr. Merigan's work has not yet been published, some reports have indicated hopeful progress against the disease, using interferon; previously there had been no useful treatment for this tumor. Interferon has been studied in other tumors at other institutions, here and overseas.

It seems to have broad-spectrum activity against not only fast-growing tumors, but also slow-growing tumors. The mechanism of action is thought to be general stimulation of the immune system.

Broader trials. Enough clinical evidence has now accumulated to create a rational basis for wider exploration of interferon in cancer patients. Several investigators have been working with interferon at Stanford University, M.D. Anderson, Roswell Park and Memorial Sloan-Kettering hospitals. Until now the main source of U.S. funding has been outside the field of cancer (the National Institute for Allergy and Infectious Diseases), for it was only quite recently that the anti-tumor activity of the substance was observed.

Since there is no present national source of funding for interferon cancer research, and since the accumulating evidence points to the possibility of an important advance against malignancies, the American Cancer Society, with the advice of an expert panel of independent investigators*, has taken the bold step of funding multi-institution controlled comparative clinical trials of interferon in cancer patients.

The clinical trials will be conducted in a total of 150 advanced cancer patients, with tumors of certain sites, selected by investigators in the participating institutions.

The American Cancer Society's role is limited to paying for the material, monitoring the trials, and disseminating the results which should begin to appear about six months after treatment is started. It will take approximately 18 months to acquire enough interferon to begin treating all 150 patients.

* Dr. Joseph R. Bertino, Yale University School of Medicine
Dr. William A. Carter, Roswell Park Memorial Institute
Dr. Michael A. Chirigos, National Cancer Institute
Dr. Emil Frei III, Sidney Farber Cancer Center
Dr. James F. Holland, Mount Sinai School of Medicine
Dr. Thomas C. Merigan, Jr., Stanford University Medical Center
Dr. Herbert F. Oettgen, Sloan-Kettering Institute for Cancer Research
Dr. Elliott F. Osserman, Columbia University
Dr. Albert H. Owens, Jr., Johns Hopkins Oncology Center
Dr. Fred Rapp, Pennsylvania State University School of Medicine

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
112B - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company

AS I SEE IT

Fred W. Dahling, M.D.,
Vice-Chairman, IMPAC

Soon, if not already, all of the nearly 5,000 ISMA-member physicians will have received their annual statement of dues. On that statement is a reminder for a contribution to IMPAC. The top half of the statement requires a mandatory payment if the individual physician is to continue to be a member in good standing and is to be represented by our state organization. The IMPAC portion of the dues statement is strictly voluntary but is of equal if not of higher importance for the physician today. Why?

1. Like it or not, medicine is gradually being politicalized. And it is only the beginning. Our profession is being drawn by economic, political, and legal forces onto the political field of play. Our professional organizations must not and cannot be the bastions from which we must sally to engage in any political foray. Therefore, the need for a physician oriented political organization which embraces the strata of political ideation and persuasion relating to and encompassing medicine is obvious.

2. Most practicing physicians are busy people. They are busy taking care of their fellow citizen which they were trained to do and which they should be doing. Few physicians have the time or the resources to engage in the political arena. But by banding together and pooling their resources collectively, physicians can effectively engage in the political process and have a chance to decide what is to become of their profession.

3. IMPAC can and has been effective in helping elect to office those candidates who have philosophies concerning governmental affairs, economics, and social problems similar and at times identical to those philosophies of organized medicine. The general election of November 1978 is a case in point. IMPAC was involved in 34 races, both national and state, and contributed $21,200 to candidates who shared the political views of medicine. The candidates who were endorsed consisted of four Democrats and 30 Republicans of which 21 were incumbents and 13 were challengers. Twenty eight of these won their election. That is an 82% batting average. Not bad in any league, I would say.

4. To continue the job that has been started, IMPAC is in need of continued physician support and input. This past year our organization was made up of a little over 1,600 members who contributed some $43,000. But additional members and funds will be needed if we are to continue in this type of endeavor and be successful as in the past.

Because of these considerations, I firmly believe that the money given by the Hoosier physician to his own Political Action Committee is one of the truly big bargains left for him. It could be the difference between the failure or the success in securing the profession, as we have known it, for the next generation of Indiana physicians.

INDIANA MEDICAL BUREAU
1010 East 86th St.—72 Winterton
Indianapolis 46240
844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service

announcing . . .
national medicolegal symposium 1979

Jointly sponsored by the
American Medical Association
and American Bar Association
Caesars Palace Hotel
Las Vegas, Nevada
March 8-11, 1979

AMERICAN BAR ASSOCIATION

medicolegal

purpose:

To stimulate interest and cooperative action between the two professions in searching for answers to the many problems which confront the nation today.

- Who's Tinking with the Tort System—and Why?
- The Courts and Arbitration—Differences and Similarities
- Death—Living Wills—Right to Die—No Code Blue
- Medical Profession Future
- Legal Profession Future
- The Legal Status of Medical and Lay Personnel Connected with Operation of a Hospital
- Prescription Drugs; Reactions; Package Inserts and Liability
- Profession-Owned Insurance Companies. Medical and Legal Liability Coverage—Pitfalls and Solutions
- Five Most Important Cases in Medicine and Law in 1978-1979

For further information, write:

National Medicolegal Symposium 1979
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610











The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).

© 1978 The Upjohn Company













Motrin 400 mg TABLETS
ibuprofen, Upjohn

The confidence that comes from experience—one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

J-6857-4

The confidence that comes from experience—
one more reason to prescribe

Motrin 400 mg TABLETS
ibuprofen, Upjohn

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

How Supplied

Motrin Tablets, 300 mg (white)	
Bottles of 60	NDC 0009-0733-01
Bottles of 500	NDC 0009-0733-02
Motrin Tablets, 400 mg (orange)	
Bottles of 60	NDC 0009-0750-01
Bottles of 500	NDC 0009-0750-02
Unit-dose package of 100	NDC 0009-0750-06
Unit of Use bottles of 120	NDC 0009-0750-26

Caution: Federal law prohibits dispensing without prescription.

NIM-3

Upjohn The Upjohn Company
Kalamazoo, Michigan 49001

Some people can't see our name.

Prevent Blindness.

Every 12 minutes someone goes blind. Yet, half of all blindness is needless. Early eye care for children can correct amblyopia. Glaucoma can be arrested... sight lost to cataracts, restored. Blinding eye injuries can be dramatically reduced by safety precautions. These all add up to saving precious sight. For more information write: National Society for the Prevention of Blindness, 79 Madison Avenue, New York, NY 10016.

PREVENT BLINDNESS®

Memorandum

Public Law 135: Child Abuse

WAYNE A. STANTON
Administrator
Indiana Dept. of Public Welfare

(The following memorandum was recently dispatched by Mr. Stanton to all Indiana physicians and hospitals. A copy of the public law was enclosed with the mailing, but it is not reproduced here due to space limitations.)

The State Department of Public Welfare is pleased to be working with a number of professions in the implementation of Public Law 135, Acts of the 1978 Indiana General Assembly, concerning the reporting of child abuse or neglect. There are a number of sections of this law which pertain to the responsibilities of medical practitioners and hospitals.

The following summary may be of some assistance to you in reading the law . . .

Chapter 3, Section 3(b). If an individual is required to make a report under this chapter in his capacity as a member of the staff of a medical or other public or private institution, school, facility, or agency, he shall immediately notify the individual in charge of the institution, school, facility, or agency, or his designated agent, who also becomes responsible to report or cause a report to be made. However, nothing in this section is intended to relieve individuals of their obligation to report on their own behalf, unless a report has already been made in regard to the individual's belief. Failure to make the report as required by this subsection shall also be, in addition to the penalty imposed by subsection (a) above, a Class B misdemeanor.

Chapter 3, Section 4. Any person who has a duty to report child abuse or neglect under section 3 of this chapter shall immediately make an oral report to the local child protection service (in the local county welfare department) or law enforcement agency.

Chapter 3, Section 5. If the institution making the report is a hospital and if the case involves the death of the child in question, the coroner shall report his findings to the hospital.

Chapter 3, Section 6. A medical practitioner or hospital treating a child shall take, or cause to be taken, photographs of the areas of trauma visible on the child, who is the subject of a report, and if medically indicated, cause a radiological examination of the child to be performed. The reasonable cost of photographs taken under this section will be reimbursed by the State Department of Public Welfare as will x-rays, using your established Medicaid fee schedule (if coverage is not available through Medicaid, parents' health insurance, or if the family is unable to pay). Forms for reimbursement may be obtained from the local county department of public welfare. All photographs and a summary of x-rays and other medical care shall be sent to the local child protection service at the time the written report is sent, or as soon thereafter as possible.

Chapter 3, Section 7. A person who makes or causes to be made a report of child abuse or neglect, photographs or x-rays, or participates in any judicial proceeding resulting from such report is immune from civil or criminal liability.

Chapter 3, Section 8. The privileged quality of communication between a medical practitioner and his patient may not be a basis for excluding evidence in any judicial proceeding resulting from a report of child abuse or neglect; or, for failing to report, as required by this law.

Chapter 3, Section 18. Reports made under this chapter are confidential, but shall be available to a physician who has before him a child whom he reasonably suspects may be abused or neglected.

All reports shall be made to local county welfare departments. We are looking forward to a positive and cooperative working relationship.

ISMA Board Actions

(The following actions were taken by the ISMA Board of Trustees during their regularly scheduled meeting Nov. 19, 1978.)

Objection to ICD-9-CM

. . . Endorsed the AMA's objection to HEW's implied mandate that the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) be adopted nationally for coding procedures and gathering data on health problems and health care in hospitals and similar institutional environments in lieu of AMA's CPT-4, now being used in a number of states for reporting physician services to all third-party intermediaries.

Generic Drug Substitution

. . . Affirmed the action of the Executive Committee that ISMA policy of opposition to any generic substitution be expressed to the Governor, with the suggestion that the Pharmacy Board be asked to implement an amendment that would require the pharmacist to notify the physician of the drug that was substituted (after the initial six-month period) to enable the physician to have accurate information in the patient's records.

Confidentiality of Medical Records

. . . Approved your AMA delegation's introduction of a resolution at the Dec. 3-6 meeting in Chicago that requests an AMA investigation into HEW's proposed plan to collect UHDDS information on non-federal patients, in violation of traditional practices, and immediately request the Department of HEW to withdraw any proposed plan to collect this information if the AMA has not already initiated the action.

ISMA-Owned Properties

. . . Requested staff to prepare a comprehensive report regarding all three properties and authorized the possible acquisition of the building at 3951 N. Meridian, adjacent to the ISMA headquarters building (for a maximum of $225,000); upon receipt of the report, the Board will decide the disposition of ISMA property located at 3942 N. Pennsylvania.

Unethical Advertising

. . . Referred to the Commission on Medical Education and Licensure complaints from several county medical societies regarding unethical practices of other health professionals in advertising.

Letters Criticizing HSAs

. . . Directed ISMA staff to send copies of letters received from outside sources criticizing HSAs to our Representatives and Senators in Washington.

Area IV PSRO

. . . Approved having ISMA's legal counsel prepare a cover letter, on ISMA stationery, with the board chairman's approval, to be sent along with the petition obtained from PSRO Area IV physicians, which states that the present PSRO in Area IV is not representative of their area and therefore requests a poll of their physicians in accordance with 42 U.S.C. 1320c-1(f)(1) and 42 C.F.R. 461.1.

Policy on National Health Insurance

. . . Instructed your AMA delegation to report to the AMA House of Delegates that any reference to National Health Insurance be changed to National Health Tax, and that ISMA now might accept some move toward catastrophic coverage and indigent or near-poor care only if it is covered through the private sector.

Referral of 1978 Resolutions

78-1—ISMA Specialty Section of Medical Directors and Staff Physicians of Nursing Facilities:
Referred to Commission on Constitution and Bylaws.

78-3—Funds for Board of Medical Licensure:
Referred to in-house legal counsel and Commission on Legislation.

78-6—ISMA Spokesperson:
Endorsed the Executive Committee's suggestion that staff present recommendations.

78-7—Medical Student Component Society:
Referred to the Commission on Constitution and Bylaws and to the Commission on Medical Education for their information and for transmittal to the Indiana University Student Council.

78-8—Uniform Health Insurance Claim Form:
Referred to the Subcommission on Insurance.

78-9—Admission to AMA Programs and Seminars:
Referred to Indiana Delegation to the AMA.

78-10—Speaker and Vice Speaker of the House in AMA Delegation:
Endorsed the Executive Committee's recommendation that the actual expenses be reimbursed to the speaker and vice speaker until such time as the Executive Committee can further study the policy of reimbursement to the delegation for AMA meetings. The final recommendation will be referred to the Commission on Constitution and Bylaws and to the Indiana Delegation with an updated fiscal note included in the ISMA policy manual.

78-11—Second Opinions:
Referred to the Commission on Public Relations.

78-12—Membership Recruitment — Dues Reduction:
Requested the Executive Committee consult with the speaker of the House and report back to the Board after determining the fiscal impact. The final recommendation will be referred to the ISMA membership department and to the Commission on Constitution and Bylaws. The 1978-79 dues billing will be processed as usual until that time.

78-13—Student Loan Program:
Referred to the Executive Committee to research other available loan programs and to the Commission on Constitution and Bylaws for information only.

78-14—Continuous Care in Health Care Facilities:
Referred to the Commission on Medical Service for further study and recommendations to the 1979 House of Delegates.

78-16—Communicating Information on Organized Medicine to Students, Interns and Residents:
Referred to the Commission on Public Relations.

78-17—Comprehensive Community Mental Health Centers:
The contents of this resolution will be transmitted immediately to the Joint Commission on Accreditation of Hospitals and to the Medical Licensing Board.

78-18—Blue Shield Board Nominations:
Referred to the Commission on Constitution and Bylaws for recommendations to the 1979 House of Delegates.

78-20—Cost Containment:
Referred to the Committee on Voluntary Effort.

78-21—Health Screening Programs:
Referred to the Commission on Medical Service.

78-22—Cooperation with PSRO:
Referred to the Commission on Medical Service and to the Ad Hoc Data Processing Steering Committee.

78-23—Nominations for Blue Shield Board:
Referred to the Commission on Constitution and Bylaws.

78-24—Pennsylvania Court Action:
Referred to the Indiana Delegation to the AMA.

78-25—Affirmation of Present AMA Code of Ethics:
Referred to the Indiana Delegation to the AMA.

'CONTROLLING HOSPITAL COSTS: The Revealing Case of Indiana'

MARTIN T. BADGER
Managing Editor

A STUDY OF INDIANA'S 18-year-old system for controlling hospital costs, commissioned by the Department of Health, Education and Welfare, has not been favorably received by that agency. In its quest for legislation authorizing it to set up a federal program to control hospital costs, DHEW sought to prove that the Indiana system would not work in other parts of the country. The plan back-fired. Seven other states have recently started systems with the essential features of the Indiana plan.

The study, "Controlling Hospital Costs: The Revealing Case of Indiana," was prepared by Patrick O'Donoghue, M.D., president of Spectrum Research, Inc., Denver, Colo. Reportedly, DHEW funded the major part of the study to the tune of $560,000. Publication of the results was financed by Policy Center, Inc., Denver.

Elton TeKolste, president of the Indiana Hospital Association (IHA), which with Indiana Blue Cross (IBC) established the existing "prospective rate setting system" in 1960, declared, "We are extremely proud of the results (of the study) in that it proves that a private system can work, and work very effectively. In addition, the payoff is much greater than any bureaucracy or commission could hope to achieve, namely, $1,000 savings for every net dollar spent."

TeKolste added, "We have a good story to tell which indicates that we can do the job without interference from the government. . . ."

What follows is that story, based on Dr. O'Donoghue's report.

Dr. O'Donoghue outlined 10 characteristics that he said constitute the minimum features essential to the Indiana system's effectiveness:

- The program's announced and actual purpose is to improve the efficiency of hospital care and to thus control hospital costs;
- Adherence to the program's rates is essentially compulsory for Indiana Hospitals;
- The total hospital budget is the binding unit of negotiation;
- Hospitals are paid on the basis of rates established prospectively;
- Sufficient manpower and other resources are devoted to the Indiana system;
- The program emphasizes the justifiability of costs from a management perspective and systematically reinforces this emphasis through its periodic review procedures;
- There is extensive private sector involvement, including both hospital and third-party payers.
- Substantial and broad-based nonprovider involvement is present;
- The program has the firm support of individual hospitals; and
- The Indiana system is flexible and informal, avoiding strict adherence to bureaucratic procedures.

Operational prospective rate setting systems with all the above features now exist in at least seven settings: Wisconsin, southwest Ohio, Rhode Island, Michigan, Florida, northwest Missouri and Minnesota. O'Donoghue believes that it is possible in most states to set up a prospective rate setting system with the Indiana program's essential features.

Just what is a prospective rate setting system?

Simply, it's a system by which hospitals are paid. Certain such systems, however, can aggravate hospital cost inflation rates.

Under the prospective rate setting system, hospitals are paid on the basis of rates established in advance by the rate setting program. It differs from an approach introduced in the 1960s called "retrospective reimbursement." The latter entails advancing hospitals interim payments for cash flow purposes and reaching final settlement on the basis of actual costs incurred during the preceding reporting period; Medicare is an example of this system, one that excludes certain types of costs. Its fatal flaw, Dr. O'Donoghue said, is that large hospital cost savings cannot be obtained by outlaw-

ing certain types of costs unless the effectiveness of hospital care is drastically reduced. Retrospective reimbursement offers hospitals no incentive to restrain costs, because as long as a cost can be categorized as allowable after the fact by the hospital, it is covered by the third-party payer.

But prospective rate setting, the Indiana system, provides an incentive for a hospital not to exceed its projected budget, which forms the basis for its prospective rates; the hospital budget, and thus planned hospital actions, are reviewed in advance. In this way, a much wider array of options are open to the program and to the hospital.

The general hypothesis of the prospective rate setting system is that it can reduce hospital cost inflation without adversely affecting the effectiveness of hospital care and without incurring inordinate expenses.

As previously mentioned, adherance to the program's rates is essentially compulsory for Indiana hospitals; participation in the Indiana program—a system established and operated by the private sector—is a requirement of hospitals' contracts with Indiana Blue Cross. In accordance with program guidelines, Indiana hospitals charge self-paying patients the same rates they charge individuals covered by commercial insurers. But the guidelines are not detailed strictures; they are general rules designed to be interpreted flexibly.

The Indiana program encompasses all but publicly insured hospital patients; its scope, therefore, extends to about 75% of Indiana hospital patients. The Medicare and Medicaid programs have chosen not to pay hospitals according to prospectively determined rates in the state, choosing instead to use their customary retrospective reimbursement approach.

IBC, which administers the program, has established a special body, the Rate Review Committee (RRC) to review and approve hospital budgets and charges.

Working closely with IBC, the IHA plays a major role in devising the program's guidelines and data requirements through its Council on Finance and Reimbursement. In addition, its executive officer and the chairman of IHA serve as ex officio members of the Rate Review Committee. The RRC has a total of 20 members, who serve on a part-time basis; six are hospital managers, while the other 14 are public members drawn from a wide variety of backgrounds including accounting, medicine, banking and industry management.

The Indiana system has the solid support of individual hospitals, Dr. O'Donoghue's study found. In fact, 84% of them say the Indiana program is a good system and should be continued; 10% think it should be replaced with another type of prospective rate setting program; only 4% prefer a retrospective reimbursement system.

Dr. O'Donoghue's study shows that the Indiana program achieves its foremost objective: It substantially reduces total hospital costs. The system's influence on Indiana hospital costs during the main study years—1968-73—is summarized in the following table:

Hospital Cost Savings of the Indiana Program

	Impact on Cost per Case	Indiana Hospital Cases	Hospital Cost Savings
1968	−$16	670,000	$10,720,000
1969	−$23	688,000	$15,824,000
1970	−$29	712,000	$20,648,000
1971	−$49	733,000	$35,917,000
1972	−$69	747,000	$51,543,000
1973	−$80	777,000	$62,120,000

As shown in the chart, savings during the main study years total almost $200 million.

O'Donoghue's findings indicate that the Indiana program's dominant effect has been on the hospital's use of labor resources. It impacts total hospital cost primarily by reducing labor cost. The key to hospital cost control, he said, is the labor sector, which comprises about 60% of total hospital costs. The program also decreases the hospital's use of supplies and services (33% of total hospital costs), thus reducing their total cost. The Indiana system's influence on the labor sector is pervasive; it reduces both wage level and skill mix; it increases individual productivity. It not only reduces administrative/hotel costs, but it also reduces the costs of nursing and ancillary services.

What are the side effects, if any?

The Indiana program's influence on hospital quality, O'Donoghue found, is insignificant.

CONTINUED ON NEXT PAGE

This, he said, proves that efficiency gains can result in sizeable cost reductions. It is not necessary to change the nature of output to lower hospital costs.

The Indiana program does not affect the types of services provided or utilization practices. It has no significant influence on the three case-intensity variables—case mix, case severity or elective surgery. Further, it has no significant influence on length of stay, a fundamental measure of hospital utilization.

There simply is no evidence that the Indiana system damages the effectiveness of hospital care, Dr. O'Donoghue said. Costs are lower, but the nature of hospital output is unchanged.

Much of the credit for the success of the Indiana program rests with hospital management, the study revealed. Site visits indicated that the Indiana program influences the actions of hospital administrative staffs in general and the administrators in particular. The program achieves its effect partially through financial incentives, but mostly through professional incentives, e.g., the learning experience arising from periodic budget review, the building of a good reputation to enhance professional advancement, or the gut reaction of an administrator that he/she will "simply not defend that kind of an increase to the Rate Review Committee."

The Indiana system is directed toward the management of the hospital; its major focus is on the justifiability of costs from a management perspective. Because hospitals feel they have a voice in the program, they respect it. Through its review procedures, the Indiana system is thus able to reinforce the inherent desire of most administrators to be efficient managers, thereby improving hospital management.

The Indiana system achieves its greatet cost savings by motivating the administrative staff to improve hospital management, thus proving, for example, that cost savings can be realized without substantial physician support. O'Donoghue said three elements are responsible: Greater cost consciousness, improved planning and budgeting, and careful decision making on evaluation of cost tradeoffs.

The next largest fraction of the program's cost savings results from the preparation of rate requests by hospitals. These are prepared with care because the projected budget is a binding document in Indiana—it is the basis of the hospital's rates.

The majority of the Indiana system's cost savings are thus attained before submission of the rate request. The remainder are due to specific RRC actions. Again, flexibility is the keynote. The RRC allows negotiation to proceed before positions are hardened; it facilitates the development of compromises acceptable to all parties.

In commenting on the Spectrum study, the INDIANAPOLIS STAR said that the Indiana plan "has been successful because it is a cooperative enterprise in which hospital rates and budgets and utilization are reviewed by a committee (the RRC) including broad representation from both inside and outside the health care industry."

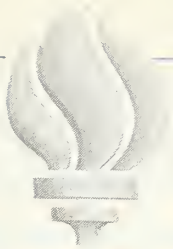
The STAR noted that "O'Donoghue's conclusion was that it works because hospital administrators believe in its soundness and fairness, and they have a voice in its operation. By contrast, if a federal cost-control system were established, hospital administrators probably would have little say in it, and if experience with other federal control programs is any criterion they probably would have little confidence in its practicality or its fairness."

The Indiana program's total annual expenses are substantial, but not high, O'Donoghue said: $240,000 or about $2,200 per Indiana hospital. These expenses include not only the cost incurred by IBC, but also those borne by the IHA and participating Indiana health planning agencies. The costs attributable to the RRC are low, equalling $11,000 or less than 5% of the program's total expenses. The overall net operating expenses of the program are almost trivial, he noted, equalling about 1/1,000 of its hospital cost savings.

Dr. O'Donoghue concluded that the Indiana system does not produce undersirable side effects. It does not lower the quality of hospital care nor does it damage the nature of hospital output in other ways. It neither reduces the range of services offered by hospitals nor threatens the financial viability of hospitals.

The Indiana program sharply reduces hospital cost inflation, he said. It does not adversely affect the effectiveness of hospital care; and it does not incur inordinate expenses.

The study findings therefore indicate that the program is a solid success in Indiana.



ROCKWOOD

INSURANCE COMPANY OF INDIANA

Professional Liability Insurance Specialists

Physicians, Surgeons, Dentists

Hospital Professional Liability

Represented by:

Health Care Provider Insurance Agency, Incorporated

INDIANAPOLIS . . . Hadley-Mahoney Co., 3640 N. Washington Blvd. 46205
(317) 924-5331

MICHIGAN CITY . . Lindenmeyer Insurance Associates, Inc.
801 East Eleventh Street 46360
P.O. Drawer C
(219) 879-7301

SEYMOUR Wienco, Inc., Room 20, Vehslage Building
P.O. Box 518 47274
(812) 522-2931

SOUTH BEND Hepler-Smith Insurance, Inc.
511 West Colfax Avenue
P.O. Box 1875 46634
(219) 232-4889 (Toll Free 1-800-552-2910)



AUXILIARY REPORT

Ruth (Mrs. G. Beach) Gattman
President, ISMA Auxiliary

This month's report was prepare by Bonnie H. Egnatz of Munste Auxiliary Legislation Chairman.

Now that the November elections are behind us and hopefully the "best candidate" has won, it is time for the medical community to contemplate the possible effects of future laws that might be enacted by the new Congress.

Health legislation considered by the 1979 State and National Assemblies could be the most critical to date—determining the direction and extent of future government controls. It is vital that every physician and every physician's spouse be well informed of pending health legislation and the effect that these bills, if enacted, could have on the delivery of health care in the State of Indiana.

On Feb. 13, the Auxiliary will host their annual "Meet Your Legislator Day" in Indianapolis. This year, with the help of ISMA, we will conduct a legislative workshop designed to inform you of key health-related issues. We hope that the workshop will update your knowledge of these issues and inspire you to take an active interest in working toward the defeat of excessive government controls. We feel that a united effort made throughout the State of Indiana on behalf of medicine could curb the tide of government intervention This legislative workshop is open to all Auxiliary members and their physician spouses.

Following the workshop we will host a cocktail party for the members of the Indiana General Assembly. We hope you will take this opportunity to become acquainted with your local congressmen. It is important that your representative in Congress is aware of your concern for the quality of health care in your community. You could also take this opportunity to offer your assistance to him in determining the effect that pending health legislation might have on the people in his constituency. So often lawmakers do not realize that excessive regulations hamper the physician in his efforts to serve his patients.

Please mark Feb. 13 on your calendar and plan to join us in Indianapolis. We will send more details to your counties later. We hope you will agree that a united and informed medical community can make the difference The Auxiliary motto, "We're all in this together," best expresses our reasons for concern. Join us in Indianapolis so that "together" we can do something about a better future for medicine.



McClain Car Leasing, Inc.

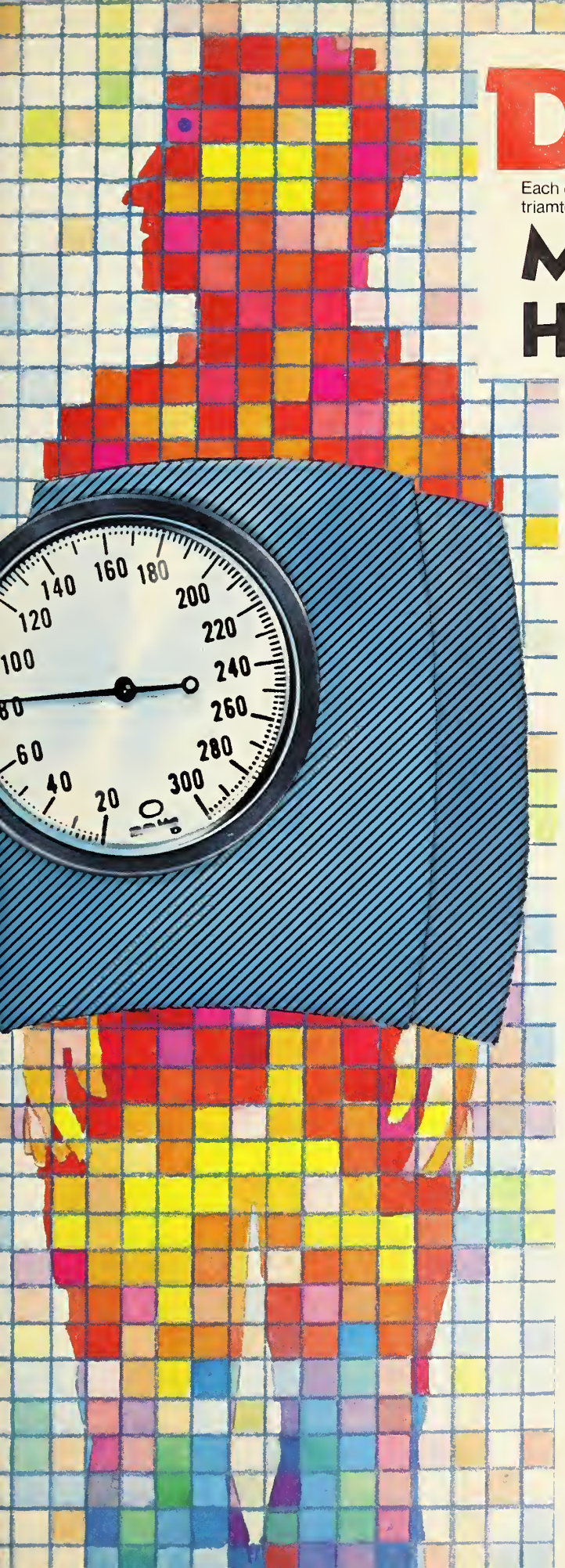
1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA



Dyazide®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Makes Sense in Hypertension*

Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:

* **Warning**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K+ frequently; both can cause K+ retention and elevated serum K+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

SK&F CO.
a SmithKline company
Carolina, P.R. 00630


When painful spasm
is the presenting
symptom...

n functional G.I. disorders*

Bentyl®

(dicyclomine hydrochloride USP)

0 mg. capsules, 20 mg. tablets,
0 mg./5 ml. syrup, 10 mg./ml. injection

ıelps control abnormal motor activity
vith minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

ı this double-blind study, twenty patients having G.I. series and exhibiting
pasm were randomly selected to receive either 2 cc. of Bentyl or sodium
hloride intramuscularly. Ten minutes after the injection another radiograph
as taken . . .

. . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride
roduced relaxation in only 3 of 10. No side effects occurred in either group of patients.



ylorospasm has
most totally blocked
assage of barium
eal.



Barium meal beginning
to pass 10 minutes
after intramuscular
injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

This drug has been classified "probably" effective in treating
ertain functional G.I. disorders.

See Warnings, Precautions and Adverse Reactions.

ee following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic.
Double-blind evaluation to control gastrointestinal spasms
occurring during radiographic examination. A preliminary report.
Western Med. 5:356-358, 1964.

Merrell

3497 (Y515A)

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection
AVAILABLE ONLY ON PRESCRIPTION.

Brief Summary
INOICATIONS
For use as adjunctive therapy in the treatment of peptic ulcer.
IT SHOULO BE NOTED AT THIS POINT IN TIME THAT THERE IS A LACK OF CONCURRENCE AS TO THE VALUE OF ANTICHOLINERGICS/ANTISPASMOOICS IN THE TREATMENT OF GASTRIC ULCER. IT HAS NOT BEEN SHOWN CONCLUSIVELY WHETHER ANTICHOLINERGIC/ANTISPASMOOIC DRUGS AIO IN THE HEALING OF A PEPTIC ULCER, DECREASE THE RATE DF RECURRENCES, OR PREVENT COMPLICATION

Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FOA has classified the following indications as "probably" effective:

May also be useful in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, acute enterocolitis, and functional gastrointestinal disorders); and in neurogenic bowel disturbances (including the splenic flexure syndrome and neurogenic colon).

THESE FUNCTIONAL OISOROERS ARE OFTEN RELIEVEO BY VARYING COMBINATIONS OF SEOATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINOICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis, myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: autonomic neuropathy; hepatic or renal disease, ulcerative colitis–Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon; hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension, hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.
It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Oo not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia, increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia, nausea, vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION Oosage must be adjusted to individual patient's needs.
Usual Dosage Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults* 1 tablet three or four times daily Bentyl Injection. *Adults* 2 ml. (20 mg.) every four to six hours intramuscularly only NOT FOR INTRAVENDUS USE MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine" (bethanecol chloride USP) should be used.
Product Information as of October, 1976

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc
Cincinnati, Ohio 45215, U S A



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique thot we hove over $4,000,000.00 in personol loons mode to Physicions ond Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, poy the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect coll is oll thot's necessory to begin processing your loon. We will come to your home, office or hospitol to close your loon ot your convenience.

This confidential loan is made for any goad purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing laan, it can be repaid in varying amaunts and an any day. You pay anly far the time yau use the money. Call taday.

PROFESSIONAL LOAN DIVISION
Ask for Colin G. Hozo
Assistont Vice President
110 Eost Woshington Street
Indionopolis, Indiono 46204
Phone (317) 631-1311

Indianapolis Morris Plan



TAX TIPS

LAWRENCE A. JEGEN, III

Mr. Jegen is a professor of law at Indiana University Indianapolis Law School, specializing in taxation, business associations and estate planning. Professor Jegen urges the reader to consult the reader's lawyer before applying the data in this article to a particular fact situation.

This article continues my discussion of ıe gift and estate tax sections of the ax Reform Act of 1976 (TRA) and the roposed changes which are in the Techical Corrections Bill (TCA).

Because of the substitution of the unied estate tax credit for the $60,000 state tax exemption and because the nified gift tax credit is scheduled to inrease (in the amount of approximately 4,000 per year) for each of the four ears which follow 1977, it is going to e much more difficult, in the future, or tax planners to readily tell their lients the amounts which may be given y the clients, gift tax free, from year to ear. That is, tax planners will have to ıemorize (or write on their cuffs) the eduction equivalents for the increasing nified estate tax credit in order to be ble to accurately discuss the amount of ax free death transfers which particular lients may make. In addition, such a iscussion will have to take into acount, among other things: uses of the ift tax marital deduction; the estate tax ıarital deduction; the estate tax charitble deduction; any use of the $30,000 ift tax exemption after September 8, 976 and before 1977; and, the amount f gift taxes paid (or assumed to have een paid) during the decedent's life.

As to the deduction equivalents of the ıcreasing unified estate tax credit, these quivalents, on a calendar year basis, are s follows.

Year	Credit	Deduction Equivalent
977	$30,000	$120,667
978	34,000	134,000
979	38,000	147,333
980	42,500	161,563
981 and hereafter	47,000	175,625

Thus, in general, assuming that a parıcular decedent had *not* utilized any porion of the individual's $30,000 gift tax exemption after September 8, 1976 and before 1977, then, such a decedent could ıave made a death transfer, to a person other than to the decedent's spouse, esate tax free, during 1977, in the amount of $120,667. Such a transfer would have produced a taxable estate of $120,667 and the estate tax on a taxable estate of $120,667 is $30,000, and this estate tax, less the 1977 unified gift tax credit of $30,000, equals zero.

And, such an individual could make a death transfer, to a person other than the donor's spouse, estate tax free, during 1978, in the amount of $137,000. Such a transfer would produce a taxable estate of $134,000 and the estate tax on a taxable estate of $134,000 is $34,000, and this estate tax, less the 1978 unified gift tax credit of $34,000, equals zero.

As to the question of the amount of death transfers which could have been made by a decedent to the decedent's spouse, during 1977, estate tax free, this amount is $370,667, and the determination of this amount may be presented as follows.

Adjusted gross estate	$370,667
Marital deduction	− 250,000
Taxable estate	$120,667
Estate tax	$ 30,000
Unified credit	−30,000
Tax payable	$ —0—

In this latter example, the estate tax marital deduction is the greater of $250,000 and $185,333 (50% of $370,667) which is $250,000.

And, assuming that such an individual died during 1978, then such an individual could make a death transfer to the donor's spouse, estate tax free, during 1978, in the amount of $384,000. The determininationof this amount may be presented as follows.

Adjusted gross estate	$384,000
Marital deduction	− 250,000
Taxable estate	$134,000
Estate tax	$ 34,000
Unified credit	− 34,000
Tax payable	$ —0—

In this latter example, the estate tax marital deduction is the greater of $250,000 and $192,000 (50% of $384,000), which is $250,000.

If an individual wants to obtain the maximum estate tax marital deduction, then there is no surer way to obtain the deduction than to devise the individual's entire estate to the individual's surviving spouse in fee. However, if this is done, then the individual may have an estate tax imposed upon one-half of the individual's estate, and then, when the surviving spouse attempts to transfer the estate (which the surviving spouse received) by gift or at death to, for example, the children of the spouses, there may be a gift tax or an estate tax imposed upon the transfer. Thus, by the time the individual's estate reaches the children, one-half of the estate may have been taxed once with an estate tax and a second time with either a gift tax or an estate tax, and, the other one-half of the estate may have been taxed once with either a gift tax or an estate tax.

Because of this potential double taxation of an estate, it has not been uncommon for an individual to merely devise one-half of the individual's estate to the surviving spouse and to devise the other one-half for the benefit of the surviving spouse and the children—in a way which prevents this other one-half of the estate from being taxed to the surviving spouse by either the gift tax or estate tax. Thus, under such an arrangement, by the time the individual's estate reaches the children, one-half of the individual's estate would have been taxed once with an estate tax and the other one-half of the estate would have been taxed once with either a gift tax or an estate tax.

However, in situations in which the individual made transfers to the surviving spouse (other than by the estate tax marital deduction devise itself) which transfers qualified for the estate tax marital deduction, then a devise (to the surviving spouse) of one-half of the individual's adjusted gross estate would result in the surviving spouse receiving more property than was necessary in order to provide the decedent with the maximum estate tax marital deduction. That is, in such a case, the will or trust agreement would have devised (to the surviving spouse) one-half of the adjusted gross estate (the maximum pre-TRA estate tax marital deduction) and in addition, the surviving spouse would have received other property which qualified for the estate tax marital deduction, and as a consequence, the decedent would be said to have "over-qualified" the estate tax marital deduction.

CONTINUED ON NEXT PAGE

TAX TIPS

In general, this type of estate planning arrangement may still be used after the TRA. However, because of the new (and increased) limitations on the estate tax marital deduction (the greater of: $250,000; and, 50% of the decedent's adjusted gross estate) and because of the new increasing unified estate tax credit, there are situations in which a devise (to the decedent's spouse) of the maximum estate tax marital deduction (or 50% of the decedent's adjusted gross estate), which devise is reduced by the other qualified property which is transferred to the surviving spouse, may cause a larger total estate tax (and/or gift tax) to the spouses than would be imposed if the decedent devised a *smaller* amount of funds to the surviving spouse, which smaller devise would result in a smaller estate tax marital deduction.

That is, as discussed above, after the TRA, each individual is entitled to an increasing unified estate tax credit which has the following increasing deduction equivalents.

For individuals dying during 1977, the unified estate tax credit deduction equivalent was $120,667; for 1978, $134,000; for 1979, $147,333; for 1980, $161,563; for 1981 and thereafter, $175,625.

For example, assume that a decedent's adjusted gross estate was $1,400,000, which consisted of: a $100,000 gift which the decedent had made to the decedent's surviving spouse in contemplation of death; real estate with a value of $100,000 which the decedent had purchased and the title to which was in the spouses' names as tenants by the entirety; $100,000 of life insurance policy proceeds, which policy was payable to the decedent's surviving spouse; tangible personal property with a value of $100,000, which was owned solely by the decedent and which was specifically devised to the decedent's surviving spouse; and, probate assets with a value of $1,000,000, the title to which was in the decedent's name alone.

Under these facts, if a decedent's will or trust agreement devised one-half of the decedent's adjusted gross estate to the decedent's surviving spouse, then the decedent's surviving spouse would receive $700,000 (50% of $1,400,000) plus the: gift of $100,000; real estate of $100,000; life insurance proceeds of $100,000; and, personal property of $100,000. That is, the surviving spouse would receive a total of $1,100,000, which is $400,000 more than would be necessary in order to obtain the maximum estate tax marital deduction for the decedent.

Because of this possibility, decedents frequently used estate tax marital deduction formula clauses which devised to the surviving spouse, for example, an amount equal to one-half of the decedent's adjusted gross estate, and which reduced that percentage amount by the value of other property which was otherwise transferred to the surviving spouse and which qualified for the estate tax marital deduction. Thus, returning to the prior example, this latter type clause would devise $300,000 ($700,000 less: $100,000; $100,000; $100,000; and, $100,000) of the probate assets to the surviving spouse. And, the decedent would be entitled to an estate tax marital deduction of $700,000 ($300,000 plus: $100,000; $100,000; $100,000; and, $100,000), which is the exact amount of the maximum estate tax marital deduction to which the decedent is entitled.

Thus, just prior to the TRA, one of the most popular estate planning arrangements was for an individual's will or trust arrangement to devise to a marital deduction trust, referred to as *Trust A*, an amount equal to the maximum estate tax marital deduction (or, one-half of the decedent's adjusted gross estate) reduced by the value of the other assets which were transferred to the surviving spouse and which qualified for the estate tax marital deduction. Then, the decedent's remaining assets (minus death taxes) were transferred to a family trust, referred to as *Trust B*. In a nutshell, Trust A generally required the net income from Trust A to be distributed to the surviving spouse and granted the surviving spouse a general power of appointment over the trust estate, which power could be exercised during the life and/or at the death of the surviving spouse. Thus, the exercise or release of the general power of appointment during the surviving spouse's life could subject the surviving spouse to the gift tax and the exercise or release or (the mere existence of the power to exercise the power) at the surviving spouse's death could subject the surviving spouse to the estate tax. On the other hand, Trust B generally required the net income from Trust B to be distributed to the surviving spouse and granted the surviving spouse only limited powers of appointment, and thus, the surviving spouse was not subjected to either gift or estate taxation on the trust estate of Trust B when the surviving spouse exercised or released the limited powers of appointment or when the surviving spouse died with the power to exercise such limited powers.

Thus, for example, if a decedent has an adjusted gross estate of $200,000, and the decedent devises (to the decedent's surviving spouse) the new maximum estate tax marital deduction, then the surviving spouse (or Trust A) would receive $200,000 and the decedent would not need to use any of the decedent's unified estate tax credit in order to eliminate the decedent's estate tax. However, when the surviving spouse transfers the surviving spouse's estate to the children (by gift or at death), then the surviving spouse's unified gift tax or unified estate tax credit might not eliminate the surviving spouse's gift tax or estate tax. On the other hand, if the decedent leaves the children (or Trust B) an amount which is equal to the deduction equivalent of the decedent's unified estate tax credit (for example $134,000 for 1978) and leaves only $66,000 to the surviving spouse, then the decedent still will not be subject to any estate tax and the decedent's estate could pass, eventually (and in theory), estate tax (and gift tax) free to the children.

Thus, in theory, during 1978, a decedent might want to first devise an amount (of the decedent's estate) up to the amount of the deduction equivalent of the unified estate tax credit (that is, up to $134,000) to the children (or to Trust B), and then, devise the maximum estate tax marital deduction (minus the other qualifying transfers) to the decedent's surviving spouse (or to Trust A), and then devise the balance of the estate to the children (or to Trust B). Under this arrangement, the children (or Trust B) would receive all of the decedent's estate up to $134,000, and then, the decedent's surviving spouse (or Trust A) would receive any amount of the estate up to the greater of $250,000 and 50% of the adjusted gross estate, and then, the children (or Trust B) would receive the balance of the estate.

If you are looking for ways to be charitable this year, I would be grateful if you would send your "out-of-date" looseleaf tax services (for example: BNA; CCH and P-H services) to me at 735 West New York Street, Indianapolis, Indiana 46202 so that I can pass them on to students who are particularly interested in studying and practicing tax law. If you would like to have one of the students pick up the services at your office, please call me at: (317) 264-4986.

ESCRIPTION: Methyltestosterone is 17β-Hydroxy-
-Methylandrost-4-en-3-one. **ACTIONS:** Methyltesto-
erone is an oil soluble androgenic hormone.
DICATIONS: In the male: 1. Eunuchoidism and
nichism. 2. Male climacteric symptoms when these are
condary to androgen deficiency. 3. Impotence due to
drogenic deficiency. 4. Post-puberal cryptochidism
th evidence of hypogonadism. Cholestatic hepatitis
th jaundice and altered liver function tests, such as
creased BSP retention, and rises in SGOT levels, have
en reported after Methyltestosterone. These changes
pear to be related to dosage of the drug. Therefore, in
e presence of any changes in liver function tests, drug
ould be discontinued. **PRECAUTIONS:** Prolonged
sage of androgen may result in sodium and fluid
ention. This may present a problem, especially in
tients with compromised cardiac reserve or renal
sease. In treating males for symptoms of climacteric,
avoid stimulation to the point of increasing the nervous,
mental, and physical activities beyond the patient's
cardiovascular capacity. **CONTRAINDICATIONS:**
Contraindicated in persons with known or suspected
carcinoma of the prostate and in carcinoma of the male
breast. Contraindicated in the presence of severe liver
damage. **WARNINGS:** If priapism or other signs of
excessive sexual stimulation develop, discontinue
therapy. In the male, prolonged administration or
excessive dosage may cause inhibition of testicular
function, with resultant oligospermia and decrease in
ejaculatory volume. Use cautiously in young boys to
avoid premature epiphyseal closure or precocious sexual
development. Hypersensitivity and gynecomastia may
occur rarely. PBI may be decreased in patients taking
androgens. Hypercalcemia may occur, particularly during
therapy for metastatic breast carcinoma. If this occurs,
the drug should be discontinued. **ADVERSE
REACTIONS:** Cholestatic jaundice • Oligospermia and
decreased ejaculatory volume • Hypercalcemia
particularly in patients with metastatic breast carcinoma.
This usually indicates progression of bone metastases •
Sodium and water retention • Priapism • Virilization in
female patients • Hypersensitivity and gynecomastia.
DOSAGE AND ADMINISTRATION: Dosage must be
strictly individualized, as patients vary widely in
requirements. Daily requirements are best administered
in divided doses. The following is suggested as an
average daily dosage guide. **In the male:** Eunuchoidism
and eunuchism, 10 to 40 mg.; Male climacteric symptoms
and impotence due to androgen deficiency, 10 to 40 mg.;
Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B.
Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu,
M.D.: Hormones for Improved Sexuality in the Male
and the Female Climacteric. *Drug Therapy,* Sept. 1976.
SUPPLIED: 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

she asked: but who will love me? and we showed her.

We love her. All of us.

Nobody pays us to love her. We're paid for something else: providing professional nursing care, nourishing meals, recreational guidance, and beautiful, well-kept surroundings.

The love is gratuitous.

It happened because she's a great gal, with a twinkle in her eye and a wicked wit, and she knows all 8 verses of Hard-Hearted Hannah.

Who wouldn't love her? In fact, after she finished the last two verses of Hannah, we felt more than love. We felt lucky.

Call us.

Americana Healthcare Center

1345 N. Madison Ave. / Anderson, IN 46011 / (317) 644-2888
343 S. Nappanee St. / Elkhart, IN 46514 / (219) 293-2544
5600 E. 16th St. / Indianapolis, IN 46218 / (317) 356-0911
2010 N. Capitol Ave. / Indianapolis, IN 46202 / (317) 924-5821
8350 Naab Rd. / Indianapolis, IN 46260 / (317) 297-4111
3518 S. Lafountain St. / Kokomo, IN 46901 / (317) 453-4666
2201 Cason St. / Lafayette, IN 47904 / (317) 447-4102



Open Visiting Hours
Approved for Medicare

Americana.
The nursing care
for people who care
about quality.

THE JOURNAL, in cooperation with e Division of Postgraduate and ontinuing Medical Education of the diana University School of Medine, offers its readers a Continuing edical Education program. This is e 13th in a series of CME articles, roduced by the faculty of the chool of Medicine and is supported y a grant from its Division of ostgraduate and Continuing Medal Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 55.



Observations on Diverticular Disease of the Colon

JOHN E. JESSEPH, M.D.
Indianapolis

Traditionally, treatment has consisted of non-operative measures. But today surgery is justified because of improvements in anesthesia, fluid and electrolyte management and antibiotics . . .

THIS PAPER IS in the form of an expanded editorial, and is intended to give my views on several aspects of the current management of diverticular disease of the colon, largely directed to what is generally called diverticulitis. I will make no attempt to document from the literature the many details that contribute to my own attitudes and recommendations, but will gather these into what I hope will be easily understandable form, leaving it to the reader to search elsewhere for expansion.

Diverticular disease is surely becoming more common in this country, parallel to the increasing frequencies of carcinoma of the colon and gallbladder disease. While dietary factors are of obvious importance, we certainly haven't yet gotten all the facts in hand. Diverticular disease is essentially unknown in countries where high-residue, low-caloric diets prevail, such as Africa and Siberia. This observation, along with some careful studies of motility patterns in the human colon have led to the current adoption of high-fiber, high-residue diets in the treatment of the early stages of the affliction.

Dietary factors cannot alone explain the frequency of the process. It is commonly observed in successive generations of families, but rarely affects all siblings. Further, the existence of diverticula does not at all imply the eventual development of fibrosis, inflammation, obstruction or perforation which are the common complications of a *progressive* process. The current theories of the origin of the diverticula generally include (or imply) the assumption that the process will be progressive, but it is clearly not so in many people.

It is not known whether changing to high-fiber diet will be of basic

The author is Coleman Professor and chairman, Department of Surgery, Indiana University School of Medicine, Indianapolis.

benefit to the patient once he has symptoms of diverticular disease, which are usually those of spasm, partial obstruction and irregularity of movement. It seems unlikely that we could expect the disordered motility to reverse, or that established muscular hypertrophy could resolve and surely the diverticula themselves couldn't be expected to disappear. Therefore it seems to me that the best use of diet change is in those young to middle-age people either known to have a few diverticula, or who are members of families in which the problem is common. In this way, the rate of progression and eventual severity of the changes may be reduced. This may be empty reasoning, though, in view of the evidence that the incidence of process has so greatly increased. That being the case, it seems reasonable to recommend that *all* Americans increase the bulk, or fiber, or indigestible substances in their diet. The trouble is, we just don't know how *much* of such things need to be eaten.

As few as 15 or 20 years ago, it was a rarity to find established diverticular disease in anyone under 60 years of age. While it is still unusual, it is not rare now to see relatively severe symptoms and vicious complications in people in their 30's and 40's. Herein lies one of the important things about this disease: It is often not thought of in younger people and they are therefore not appropriately treated until complications have severely compromised treatability. Therefore, it is essential to remember that young *can* and *do* have diverticula that can be the basis for inflammation, obstruction and perforation—the picture of "left-sided appendicitis." We are especially apt to overlook this during times of "flu" epidemics, when everyone seems to have bellyache and diarrhea. It seems a tough problem to examine and evaluate everybody in such times, but it will pay to stay alert, because viral gastroenteritis should *not* produce persistent, localized abdominal pain and tenderness, which with palpable mass is the set of findings trying to tell us that the colon is inflamed.

Even though the disease is becoming more common in younger adults, it is still more common in the middle-aged and elderly. In the latter, it is usual to find exacerbations overlooked on the assumption that the patient has some kind of "flu," and perforation may first be recognized as a large pelvic abscess and complete sigmoid obstruction.

Another point about diverticulitis is that the first attack is often unusually severe. Somehow, it often develops that the diverticular inflammation progresses so rapidly through edema, cellulitis, vascular stasis and necrosis that defense mechanisms do not (or cannot) occur. Thus, the patient may have relatively few symptoms for a short time, and follow a course similar to that of gangrenous appendicitis. It is my overall impression that the first big attack of inflammation is the most dangerous one, and when it is recognized the patient should be hospitalized for treatment with antibiotics, intravenous fluids and careful observation until the attack remits.

This leads naturally to the question of indications for operation, and of the timing of operations.

First of all, the timing of emergency operations is more important than planning for elective procedures. Perforation, which may manifest very subtly, will be the usual problem and it will be hard to decide whether to continue nonoperative treatment or to do something surgical to relieve or remove the process.

Assuming the patient is under hospital observation, the best rule is to respond to change. If there is prompt response to treatment, with reduction of fever and leukocytosis, and improvement in symptoms and local physical findings, it is best to continue conservative treatment, expecting complete resolution. But if there is not prompt improvement, it should be elected to explore the patient.

While it is necessary to consider each problem on its own, the best results will be obtained by resecting the involved part of the colon (especially the sigmoid) with proximal colostomy and closure of the rectal stump (Hartman's operation). This is clearly better, when the local conditions and the patient's condition are satisfactory, than a diverting colostomy alone. Even in the presence of sizable abscesses and edema, it is far better to go ahead and resect the colon, because the patient will get well faster and with far less residual infection, and without the risk of fistula formation, all of which make for delays in eventual recovery. (In fact, diverting colostomy often does nothing but reduce the intraluminal pressure in the colon, and while it may lessen or stop fecal leakage, it does nothing to relieve the established inflammation.) Having done resection and proximal colostomy, drains should be used in the left lower quadrant and pelvis, almost regardless of the level of contamination.

Timing of elective operations is a little more difficult. The most common situation will be the one in which the elderly patient is having progressive difficulties with partial obstruction, but it will be thought hard to justify major operation in a patient of advanced years. It comes down to this: If the patient can be brought into condition acceptable for general anesthesia, he should have resection of the involved colon. In the face of prog-

essive symptoms, the patient will rely suffer a major complication efore long, and he will then be in ven less good condition for a big peration, much less to deal with major infection as well. Con-nuing with non-operative treat-ient in such patients is gambling iat the disease will not progress nd that the patient will die of omething else. But such reasoning weak at best. Except in the resence of a recent myocardial in-rction, almost all old people can e gotten safely through colon re-ection (or any other needed major peration) and when diverticulitis thus controlled, will have a much etter life than before, and will be nore easily managed with regard o other chronic disease.

Another way of stating the case is o take a new look at the tradi-tional way of opting for operation in chronic, benign diseases of the gut. It is standard teaching and practice to treat diverticulitis by non-operative or "conservative" measures as long as a life-threaten-ing complication does not develop. For some years, however, many gastroenterologists and surgeons have become more liberal in using symptoms (intractability) as a rea-son for operation. This change is entirely justified by the greatly im-proved results of operation which have come through improvements in anesthesia, fluid and electrolyte management and antibiotics.

Therefore, it is important to think that we should do many more operations *before* the patient gets into big trouble from perforation, obstruction or even hemorrhage. Having chosen earlier operation for more patients, we will be exposing them to a much smaller overall risk of morbidity and death than if we wait for killer complications to de-velop. Of course, the decision must be made for patients one at a time, and while most doctors will continue to go to the brink with their patients, I hope they will more often ask for surgical intervention *before* the patient needs emergency operation. (This same reasoning applies to other diseases of the gut, including duodenal ulcer, chronic ulcerative colitis, Crohn's disease and even gallbladder disease.) It is inescapable: once the patient has perforation or complete obstruction his risk of dying—whatever treat-ment is used—is at least five times greater than it would have been with elective operation a month or a year before.



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS

Operated by PHYSICIANS

For the protection of PHYSICIANS

P&SLI

Physicians & Surgeons Liability Insurance Co., Inc
800 Mac Arthur Boulevard / Munster, Indiana 46321
219 836-2288

PRE-REGISTER NOW

MEDICLINICS

POSTGRADUATE MEDICAL REFRESHER COURSE

FORT LAUDERDALE, FLORIDA

MARCH 4 - 17, 1979

OUTSTANDING FACULTY

CHARLES E. AUCREMANN, M.D.
Chairman, CME Committee, F.A.F.P.
Associate Professor, Family Medicine,
College of Medicine
University of South Florida

HAROLD F. BUCHSTEIN, M.D.
Clinical Professor of Neurological Surgery
University of Minnesota

MR. KARL DIESSNER, L.L.B.
Mediclinics Legal Counsel
Minneapolis, Minnesota

DAVID E. EIFRIG, M.D.
Professor and Chairman
Department of Ophthalmology
School of Medicine
University of North Carolina

LAMAR EKBLADH, M.D.
Professor, Department of Obstetrics and Gynecology
School of Medicine
University of North Carolina

EUGENE GEDGAUDAS, M.D.
Professor and Head of Radiology
University of Minnesota

ROBERT A. GOOD, M.D.
President and Director
Sloan Kettering Institute
New York City, New York

CLAUDE R. HITCHCOCK, M.D.
Professor of Surgery
Chief of Surgical Services
Hennepin County Medical Center
University of Minnesota

H.B. KAY, M.D., F.R.C.P., F.R.A.C.P.
Chairman, Victorian Medical Postgraduate Foundation
Melbourne, Australia

DONALD R. LANNIN, M.D.
Chief Surgeon,
Shriners Hospital for Crippled Children
Twin City Unit
Minneapolis, Minnesota

JAMES C. MELBY, M.D.
Professor of Medicine
Head, Section of Endocrinology and Metabolism
Boston University School of Medicine
Boston, Massachusetts

KENNETH L. MELMON, M.D.
Chairman, Department of Medicine
Stanford University School of Medicine
Stanford, California

JOHN S. NAJARIAN, M.D.
Professor and Chairman
Department of Surgery
University of Minnesota

PAUL G. QUIE, M.D.
Professor of Pediatrics and Microbiology
Department of Pediatrics
University of Minnesota

RUDI SCHMID, M.D.
Professor, Department of Medicine
University of California
San Francisco, California

LAWRENCE M. TIERNEY, JR., M.D.
Assistant Professor of Medicine
University of California
San Francisco, California

RICHARD L. VARCO, M.D.
Regents Professor of Surgery
University of Minnesota

"THIS PROGRAM IS ACCEPTABLE FOR 49 (CATEGORY I HOURS) BY THE AMERICAN ACADEMY OF FAMILY PHYSICIANS"

SPONSORED BY FLORIDA ACADEMY OF FAMILY PRACTICE AND THE BROWARD MEDICAL CENTER

PRE-REGISTRATION — $325.00

MEDICLINICS
832 Central Medical Building
Saint Paul, Minnesota 55104

EXCELLENT FACULTY, FINEST HOTEL PEAK OF WINTER SEASON

NICOTINE ADDICTION: Treatment with Medical Hypnosis

PART 3

0% of the patients failed to quit smoking cigarettes, his country's most important preventable cause of pre-nature morbidity, disability and death . . .

HANUS J. GROSZ, M.D.
Indianapolis

N MY EARLIER PAPERS I reported on the methods and the results f treating cigarette smokers with single session of individual[1] and roup[2] hypnosis. More than 40% f the smokers were found still to e successfully maintaining absti-ence from smoking three months fter treatment.

Such results may seem gratifying, specially since these patients had ot managed to quit smoking on heir own and had been exposed to single 60-minute treatment ses-ion. On the other hand, the re-ults are clearly not good enough when we weigh the impressive failure rate of 60% against the fact that cigarette smoking is this country's most important preventable cause of premature morbidity, disability and death. Moreover, as I will show, the success rate has been significantly higher one month after treatment and has declined even further after a period of six months.

The present report deals with some of the factors that seem to have influenced treatment outcome. Owing to its brevity, we obviously cannot do full justice to the many, diverse, and rather complex issues that surround cigarette smoking, nicotine addiction, and the hypnotherapy of this behavior and affliction. Yet, some factors clearly stand out as having had a positive bearing on the treatment results while others equally stand out because they seem to have had no significant bearing on outcome despite expectation to the contrary.

RELAPSE RATE AS A FUNCTION OF TIME

If one were asked to single out the one prognostic factor in the treatment of cigarette smokers, the major importance of which all investigators would be agreed upon, one would have to pick the factor of time that has elapsed since the cessation of treatment. Regardless of the treatment method used, all longitudinal studies show that the success rate is a function of time and that within the constraints discussed below, the longer the follow-up period the lower the success rate. This also is the case in our study.

Table 1 shows the percentage of our cigarette smokers, by sex, who have maintained abstinence from smoking one, three, and six months after a single hypnotherapy session. As can be seen, the success rate for the men has declined from 59.1%, one month after treatment, to 31.1%, six months after treatment. Among the women the success rate has declined for the same two followup periods from 57.6% to 33.5%. The difference in success rates is statistically very significant for both sexes. The differences between the sexes are not significant.

The relapse rates over the six-month period do not follow a straight line. They form a curve, which when projected, evens out about 12 months after treatment to an asymptotic level of about 20% for the men and about 25% for the women. Accordingly, if the present

From the Department of Psychiatry, Institute of Psychiatric Research, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis 46223.

Acknowledgement: The assistance of Steve Bojrab, freshman medical student at I.U. School of Medicine who helped in the follow-up study, and Phyllis Bramer, research assistant, is appreciated.

trend continues, a followup study carried out after 12 months should show that between one in four to one in five patients are continuing to maintain abstinence from cigarette smoking.

Similar trends in success rates over time have been found in other anti-smoking treatment programs[3] as well as in the success rates reported from heroin and alcoholism treatment programs.[4] The curves tend to become asymptotic after 12 months. The long-range success rate varies greatly depending on patient population and treatment method used, but it seems that hypnosis has been attended with the best results.

RELAPSE RATE AS A FUNCTION OF DURATION OF SMOKING BEHAVIOR AND OF AMOUNT SMOKED

One would generally expect that the earlier in life one has started to smoke, the longer one's smoking habit and the more cigarettes per day one has been consuming, the worse the outlook for successfully maintaining abstinence from smoking. Only one of these expectations is borne out in our study.

Table 2, based on data from our earlier reported series of cases,[1] shows the effect of these variables on the successful maintenance of abstinence from smoking three months after a single individual hypnotherapy session. As can be seen, there is a slight trend in this direction both with regard to the age of onset of smoking and the age when treated. But the differences in neither of these two variables attain statistical significance. On the other hand, the amount smoked has clearly been a factor of importance in determining outcome. The mean difference in the number of cigarettes smoked between those who have quit and those who have failed to quit smoking amounts to less than half a pack of cigarettes a day but is statistically significant at a better than the .001 level. However, in at least one reported study,[5] the ability to stop smoking was found to bear no relationship to the initial quantity of cigarettes smoked. On the other hand, the quantity of cigarette consumption was significantly correlated ($p<0.01$) with the occurrence of withdrawal effects—itself a factor conducive to relapses.

TABLE 1

Success rates (in percents) of male and female cigarette smokers who succeeded in maintaining abstinence from cigarette smoking one, three and six months after a single individual hypnotherapy session. Number of patients followed up: 496 (41.9% male) after one month; 479 (42.2% male) after three months; 449 (40.8% male) after six months.

	One Month	Three Months	Six Months	p
Male	59.1	43.6	31.1	.0001
Female	57.6	44.0	33.5	.0001
p	.809	.991	.680	

RELAPSE RATE AS A FUNCTION OF THE PATIENT'S ATTITUDE AND PERSONALITY

Personality and attitude play a significant role both in the decision to quit smoking and in the implementation of that decision. The importance of attitude in the cessation of smoking shows up well in the change in smoking habits of health care professionals as a result of their awareness of the health hazards of smoking. In 1967, one of three American physicians was smoking cigarettes; by 1975, the number of physicians smoking cigarettes had dropped to one in five.[6] In the same time span, the incidence of smoking among dentists dropped from 34 to 23% and among pharmacists from 35 to 28%. According to the survey reported by the National Clearinghouse for Smoking and Health,[6] 64% of the physicians, 61% of the dentists, and 55% of the pharmacists were former smokers who had quit. More than 90% of the surveyed physicians believed it to be their responsibility to set a good example by not smoking cigarettes while the number of cigarette-smoking physicians who were smoking in front of patients dropped from 54% in 1967 to 39% in 1975.

In the present study, we asked our patients before treatment to rate on a scale of 0 to 10 the intensity of their smoking enjoyment, their motivation to quit smoking, their self confidence in their unaided ability to quit smoking, their confidence in hypnosis as an aid in their effort to quit smoking, and the intensity of their general feeling of nervousness.

TABLE 2

Effect of age of onset of smoking, age when treated, and amount smoked when treated on the maintenance of abstinence from smoking three months after a single individual hypnotherapy session of 479 cigarette smokers.

Maintained Abstinence	Mean Age of Onset	Mean Age When Treated	Number of Cigarettes Smoked
Yes	18.4	40.4	32
No	17.6	40.1	38
p	.213	.452	.001

TABLE 3

ffect of attitude on the maintenance of abstinence from smoking three onths after a single individual hypnotherapy session of 479 cigarette nokers. Subjects rated on a scale from 0 to 10 their enjoyment of smoking, eir motivation (desire) and their determination to quit smoking, their nfidence in their ability to quit smoking on their own, their confidence in ypnosis as a means of helping them to quit smoking, and their general eling of nervousness.

aintained bstinence	Enjoyment	Motivation	Confidence in Self	Confidence in Hypnosis	Nervousness
Yes	6.6	8.2	3.8	8.5	5.4
No	7.4	8.1	3.4	8.5	6.1
p	.282	.641	.138	.918	.062

Table 3 shows the differences in ean scores on these variables be- een those who have successfully aintained abstinence from smok- g for three months and those who ve not. There are trends in the pected direction in all the vari- les except, surprisingly, in con- dence in hypnosis which seems to ve had no bearing on the results. owever, only the intensity of rvousness is close to being statis- ally significant ($p<.062$). The tients who have failed to quit noking rated their nervousness % higher than those who have cceeded in quitting.

This finding is compatible with e findings of investigators using her rating scales of nervous nsion. For example, the neuro- cism score on the Maudsley Per- nality Inventory (which reflects elings of anxiety, tension and rvousness) was similar for smok- s and non-smokers in the general pulation;[7] however, in at least o independent studies,[5,8] the score as significantly higher in smokers ho have failed to quit smoking ter treatment than in smokers who ve succeeded in quitting. In a milar vein, smokers who are tense d expect difficulty in handling nsion without smoking seem less kely and able to reduce their vels of smoking than smokers who ticipate that they are able to ndle tension without smoking.[9]

THE CLINICIAN AND HIS TREATMENT METHOD AS SIGNIFICANT VARIABLES

We have no data at present on the success rates of different clinicians using similar methods of treatment on the same type of patient population or on the relative effectiveness of different hypnotherapeutic approaches. However, hypnotherapy, as any other type of psychotherapy—or doctor-patient relationship, for that matter—is more an art and a skill than a science that lends itself to be exactly reproduced; so it is not unreasonable to expect clinicians to differ among themselves in their success rates. In one study[10] that compared the counseling endeavors of 10 physicians to induce business executives to stop or to reduce their smoking, the successes varied significantly from a high of 35% to a low of 17%.

With regard to variability between hypnotherapists, one clinician reported that he has been unable to induce any of his patients to stop smoking permanently with hypnosis,[11] while another reported an astonishing success rate of more than 90%.[12] Such discrepancies can be neither reconciled nor understood without much further study.

SUMMARY

The paper discusses some of the factors that seem to have influenced the outcome of an earlier reported single session individual hypnosis treatment of cigarette smokers. Of major significance were the follow-up time period, the amount of cigarettes smoked at the time of treatment and the patient's personality.

REFERENCES

1. Grosz, HJ: Nicotine addiction: Treatment with medical hypnosis, Part 1. *The Journal of the Indiana State Medical Association,* 71:1074-1075, November 1978.
2. Grosz, HJ: Nicotine addiction: Treatment with medical hypnosis, Part 2. *The Journal of the Indiana State Medical Association,* 71:1136-1137, December 1978.
3. Hunt, WA and Matarazzo, JD: Habit mechanisms in smoking. In Hunt, WA (ed.) *Learning Mechanisms in Smoking.* Chicago: Aldine, 1970, pp. 65-90.
4. Hunt, WA, Barnett, LW and Branch, LG: Relapse rates in addiction programs. *J. Clinical Psychol.* 27:455-456, 1971.
5. Burns, BH: Chronic chest disease, personality, and success in stopping cigarette smoking. *Brit. J. Prev. Soc. Med.* 23:23-27, 1969.
6. Edit. Fewer physicians light up these days. *Bull. Amer. Coll. Physicians* 18:21-23, 1977.
7. Eysenek, HJ: Smoking, personality and psychosomatic disorders. *J. Psychosom. Res.* 7:107-110, 1963.
8. Edwards, G: Hypnosis and lobeline in an antismoking clinic. *Med. Offr.* 111:239-241, 1964.
9. Mausner, B: An ecological view of cigarette smoking. *J. Abnormal Psychol.* 81:115-126, 1973.
10. Pincherle, G and Wright, HB: Smoking habits of business executives. Doctor variation in reducing cigarette consumption. *Practitioner* 205:209-212, 1970.
11. Cohen, SB: Hypnosis and smoking. *J. Amer. Med. Assoc.* 208:335-337, 1969.
12. vonDedenroth, TEA: The use of hypnosis with "tobacco maniacs". *Amer. J. Clinical Hypnosis* 6:326-331, 1964.

Clinical Notes

JERE D. GUIN, M.D.
Kokomo

Herpes Simplex

AT EVERY DERMATOLOGY CME course someone will invariably ask "How do you treat herpes simplex?" It is an important subject especially because of the oncogenic properties of the virus and the problems in the management of obstetric patients. Unfortunately, successful treatment has eluded us for several reasons: 1) The virus can spread into contigous cells without significant exposure to the body's defenses. 2) There is approximately a two-hour head start in viral replication before antigenic material appears on the cell surface. 3) Attachment of antibody to the cell surface may be via the Fc portion of the immunoglobulin, which does not then trigger the complement cascade. This causes antibody consumption while holding immune complexes away from the cell surface. 4) Herpes simplex virus is often found to reside in the dorsal root ganglion where it finds sanctuary and is not amenable to treatment.

Suppression of recurrent episodes, however, may be possible according to a recent report in DERMATOLOGICA. Three investigators from Indiana University and UCLA have utilized a high lysine, low arginine intake in an effort to encourage normal protein manufacture while inhibiting viral replication. They were able to dramatically limit recurrences in almost all of their patients. Unfortunately, the study was not done as a double-blind. According to one of the authors, this is now in progress. Let us hope the results are favorable. At present, there seems to be little better to do than to aseptically open early blisters and allow them to dry.

BIBLIOGRAPHY

1. Jarratt, Michael: Immunology of herpes simplex infection. *Dermatology* 63-67, Aug 1978.
2. Griffith, RS, Norins, AL and Kagan, C: A multicentered study of lysine therapy in herpes simplex infection. *Dermatologica* 156:257-267, 1978.

Para-Amino Compounds

RECENTLY I WAS CALLED to the emergency room to see a patient with severe contact dermatitis. His condition started with a waistband dermatitis but subsequently spread locally and then became generalized. A tell-tale sign was a weeping eczema of the interdigital webs. This patient had applied three different lotions or creams with his hands and was allergic to all of them.

A subsequent 4 mm patch test to benzocaine (ethyl aminobenzoate) caused large blisters and extended 40 or 50 mm beyond the original patch. Patch tests were also positive to other para-amino compounds. Individuals sensitive to benzocaine will frequently show cross-reactions to these chemically related products. The list of such agents is long but it includes dyes, sulfa drugs, certain anesthetic agents, sunscreens, and paraben preservatives. Benzocaine can be a potent sensitizer when used on areas of long standing eczema. The potential problems with this agent enormously outweigh any transient benefits it might have as an antipruritic.

Fisher, Alexander A: Contact Dermatitis, Second Edition, Philadelphia, Lea & Febiger, 1974, pp. 297-298, 312-313.

Bad News

SHOTGUN CONCOCTIONS promising something for everything do so at a price. Mycolog® cream is a good example of such a preparation. This steroid smorgasboard contains in its formulation ethylenediamine, neomycin, parabens and a perfuming agent, all of which are potential sensitizers.[1] It is commonly used in the treat-

Dermatology

ient of moniliasis, although the neomycin and ramicidin in the formula are ecologically inppropriate in that condition. Furthermore, aplications of a fluorinated steroid to intertriginous reas may cause atrophic striae.[2]

The use of this preparation in areas of stasis ermatitis may cause iatrogenic sensitization, nce that condition provides an adjuvant effect or potential sensitizers. Once allergy develops o any component, sensitivity to others is apt to llow.

Of all the ingredients, ethylenediamine is the rinciple troublemaker. Persons allergic to this ubstance may also react to aminophyllin, epoxy esin hardeners, certain antihistamines, and other hemically related substances.[3]

Neomycin sensitivity is usually less severe. lowever, it can limit future use of other minoglycosides. Parabens are used as preservaves in a voluminous list of commonly used gents. Reactions to them are normally uncomion, but this may change in the presence of ontact dermatitis to ethylenediamine.

Why a perfume is necessary in a topical steroid ream is beyond my comprehension. The sentizing component in the fragrance may be alpha myl cinnamic alcohol. If so, it will likely crosseact with many other fragrances.

For those who are not yet allergic, one can ormulate a satisfactory and less expensive subcitute by adding 0.5-1% hydrocortisone to ilstat® cream. This eliminates ethylenediamine, erfume, antibiotics, parabens and the fluoriated steroid. Thus one can avoid the objectionble qualities of Mycolog® cream without really acrificing anything.

BIBLIOGRAPHY

. Van Hecke, Eric: Ethylenediamine sensitivity from exposure to epoxy resin hardeners and Mycolog cream. *Contact Dermatitis* 1:344-348, 1975.
. Epstein, Norman N, Epstein, William L, and Epstein, John H: Atrophic striae in patients with inguinal intertrigo. *Arch Dermat* 87(4):450-457, 1963.
. Fisher, Alexander A: Cross-reactions between epoxy resin "amine" hardeners and ethylenediamine. *Cutis* 17:839-841, May 1976.

WHAT'S NEW?

Bendix Corporation is introducing a new compact "single dial control" oxygen concentrator. The 4000 Oxygen Concentrator draws room air through filters, then separates oxygen and nitrogen through a system of molecular sieves. Oxygen-enriched air at a concentration of 90 percent is available at flow rates of 1, 1.5, 2, 3, or 4 liters per minute. The unit is double insulated and uses a standard two-prong electrical plug. It is designed for home use.

* * *

MetPath, Inc. announces that it is now routinely performing the Male Prostatic Acid Phosphatase Test[SM] for use by physicians in detecting and monitoring cancer of the prostate. This is a new immunoassay test and is more specific and more sensitive than older tests.

* * *

IBM has a low cost diagnostic device that can help physicians quickly detect many of the abnormalities associated with heart disease. It is an electrocardiograph with a small computer which interprets the ECG according to the fashion in which it has been programmed. It also has a visual display to alert the operator to signal problems which may affect the quality of the ECG.

* * *

Burroughs Wellcome has a new self-study program which examines some of the problems physicians face with digoxin therapy. It is designed as a guide to recognition and treatment of patients in cardiotoxic or under-digitalized states. The program includes a 30-minute, 16-mm film and a monograph. Obtainable free of charge from the Burroughs Wellcome professional representative.

* * *

Merck Sharp & Dohme has received FDA approval for marketing "Clinoril" (sulindac), a non-steroidal anti-inflammatory which is effective against five major arthritic diseases. Rheumatoid arthritis, osteoarthritis, ankylosing spondylitis, acute gouty arthritis and acute painful shoulder due to bursitis and tendinitis may be treated with the new drug.

* * *

Amko announces a large variety of trachea and laryngectomy tubes—12 different styles—some in up to 14 different sizes. An improved Jackson laryngectomy tube comes in sterling silver or stainless steel. A free catalog on tubes and other fine surgical instruments is available.

* * *

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

WHAT'S NEW?

The 3M Company is marketing antitumor "seeds," smaller than a grain of rice, consisting of a radioactive isotope of iodine (I-125) encapsulated in a tiny titanium tube. Iodine-125 emits very soft x-rays. Such rays may be concentrated with a tumor and will penetrate only a short distance. The half-life is 60 days. "I-125 Seeds" are most commonly used in treating cancer of the prostate.

* * *

Searle has begun marketing an oral diuretic that can be administered once a day for effective 24-hour control of hypertension. The name is Diulo (metolazone), and is expected to encourage patient compliance. If taken in the A.M. most of its diuretic effect is during the first 16 hours, while the patient is awake and the blood pressure tends to be high. The diuresis lessens at night when blood pressure tends to be lower. The incidence of nocturia is rare.

* * *

Eli Lilly has FDA approval for marketing a new injectable cephalosporin antibiotic, Mandol® (cefamandole nafate). It is active in vitro against a number of organisms that have been resistant to other cephalosporins. It may be administered by intravenous or intramuscular routes.

* * *

Elkay Products is introducing unbreakable sterile and non-sterile specimen cups with threaded, leakproof caps. Capacity is 4.5 oz. The threaded cap seals in 1/4 turn to provide a leakproof, odorproof closure. Caps are color coded to distinguish sterile from non-sterile containers.

* * *

In Books . . .

Little, Brown and Company has published "The Sportsmedicine Book," written by Dr. Gabe Mirkin, an authority on sportsmedicine and an athlete. It is written from the preventive viewpoint and is intended for people who are in active sports either occasionally, constantly or in between. It is especially valuable for the person who wishes to enter the active life—jogging, running, tennis or whatever.

Anchor Press has just released "Daddy Doesn't Live Here Anymore," written by Rita Turow to provide advice for parents who are divorcing. It is for divorced mothers mostly but also applies to divorced fathers. The book is concerned to a large extent with how the parents relate to the children. It is based on a national survey of divorced parents, interviews, and conferences with psychologists, psychiatrists, family counselors and lawyers. 240 pages—$3.50.

Tenuate®
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.
PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
ADVERSE REACTIONS: *Cardiovascular*. Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

Whether overweight is a complicating factor... or just uncomplicated overweight.

Tenuate® Dospan® ℞
(diethylpropion hydrochloride NF)
75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications of the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

Merrell

For prescribing information see opposite page.



EMPIRIN® COMPOUND
with CODEINE

Each tablet contains aspirin 227 mg (3½ gr), phenacetin 162 mg (2½ gr), caffeine 32 mg (½ gr), plus codeine phosphate 8 mg or 16 mg or 32 mg or 64 mg (gr ⅛ or gr ¼ or gr ½ or gr 1).

C III

(Warning—may be habit forming)

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Infiltrative Keratitis from Abuse of Anesthetic Eyedrops

Serious ocular toxicities can result from the misuse of topical ocular anesthetics . . .

ROBERT H. MICHAELS, M.D.
FRED M. WILSON II, M.D.
MERRILL GRAYSON, M.D.

Indianapolis

ANESTHETIC EYEDROPS or ointments are used frequently by ophthalmologists, emergency-room physicians, family practitioners, and pediatricians. It is well known that these drugs provide a simple and effective means for attaining superficial ocular anesthesia and that they greatly facilitate examination and minor manipulation of the eye. Not so well known is that these drugs can be highly toxic to the eye when they are used for prolonged periods of time.

The case reported here is illustrative of the serious ocular toxicities that can result from the misuse of topical ocular anesthetics.

CASE REPORT

In November 1973 a 25-year-old white man was seen in the Department of Ophthalmology, Indiana University School of Medicine, for an abrasion of the right cornea that was incurred during fitting of hard contact lenses at a local department store. The abrasion healed without difficulty.

The patient was seen again in July 1974 when he expressed renewed interest in being fitted with contact lenses because of his dissatisfaction with spectacles as a correction for his myopia. He experienced difficulty with insertion and removal of the lenses but remained highly motivated to wear them. A few days after the lenses were dispensed, the patient returned with a left corneal abrasion for which he had been given an anesthetic eyedrop by his family physician. We explained the dangers of the chronic use of topical anesthetics, and the

From the Department of Ophthalmology, Indiana University School of Medicine, Indianapolis.

Send reprint requests to Dr. Wilson at Department of Ophthalmology, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis 46202.

Supported in part by a grant from Research to Prevent Blindness, Inc., New York, N.Y.

Acknowledgement: The authors thank Robert P. Burns, M.D., for supplying them with a pre-publication copy of his manuscript, "Chronic toxicity of local anesthetics on the cornea."

abrasion healed promptly with conventional therapy.

In the ensuing two years, we saw the patient twice for abrasions of the left cornea and once for an abrasion of the right cornea, each of which healed uneventfully.

In July 1976 the patient came to us again, stating that he had injured his left cornea a few days before while spelunking in southern Indiana. He said that he had treated himself for one day with an eyedrop of neomycin-gramicidin-polymyxin and denied the use of any other medications. Corrected visual acuity was 20/200. The eyelids were mildly edematous, and there was a large epithelial defect of the cornea. There was no cellular infiltrate or necrosis of the corneal stroma. Treatment consisted of topical sulfacetamide, a topical cycloplegic agent, and patching of the eye.

One week later, there was no evidence of epithelial healing; the superficial corneal stroma had begun to show mild cellular infiltrate; conjunctival hyperemia had increased; and the edema of the eyelids had worsened. Corneal scrapings revealed occasional polymorphonuclear leukocytes but no microorganisms. Corneal cultures for bacteria and fungi showed rare colonies of *Staphylococcus aureus* and *Streptococcus viridans*. We substituted topical bacitracin for sulfacetamide, discontinued patching, and added oral acetaminophen with codeine for relief of pain.

There was no improvement. The epithelial defect remained as large as ever, and the epithelium at the edge of the defect became thickened and rolled under. The corneal stroma became more infiltrated and edematous, although there was no stromal ulceration. Additional corneal scrapings and cultures for bacteria and fungi revealed rare colonies of *Staphylococcus aureus*. Oral sodium dicloxacillin monohydrate was added to the regimen, but the condition of the eye continued to worsen. Iridocyclitis and hypopyon developed. Corneal sensation was reduced but not absent. Fluorescent-antibody tests for antigens of *Herpesvirus hominis* types I and II in corneal scrapings were negative, as were cultures for anaerobic bacteria.



FIGURE 1
Gross appearance of left eye after three weeks of abuse by pa tient of anesthetic eyedrops. Inflammatory ptosis secondary t edema of eyelids, mucopurulent exudate (arrow), and cornea infiltrate.

We hospitalized the patient and performed, under general anesthesia, an anterior-chamber paracentesis and corneal scrapings; but all material was negative for microorganisms by microscopic examination and culture. The stromal infiltrate became dense, assuming a rather discrete, circular configuration. A plaque of confluent leukocytes developed on the corneal endothelium. The overall appearance *(Figures 1 and 2)* was strongly suggestive of a fungal corneal ulcer, except that there was no stromal ulceration. Topical and subconjunctival amphotericin B produced n improvement.

The patient's behavior in the hos pital was troublesome. He left th hospital several times without au thorization and was seen loitering i various places on the campus of th medical center. Twice he was foun prowling about in offices of the ey clinic—once early in the mornin before opening of the clinic, an once late at night. Ultimately, nurse discovered that the patient wa medicating himself frequently wit anesthetic eyedrops of proparacain hydrochloride 0.5%. We came t realize that bottles of this drug wer disappearing from our examinin rooms whenever we brought the pa tient to the office for examinatior

We confiscated his proparacain and reiterated its dangers. He pro fessed to understand and agreed t stop using the drug, but he con

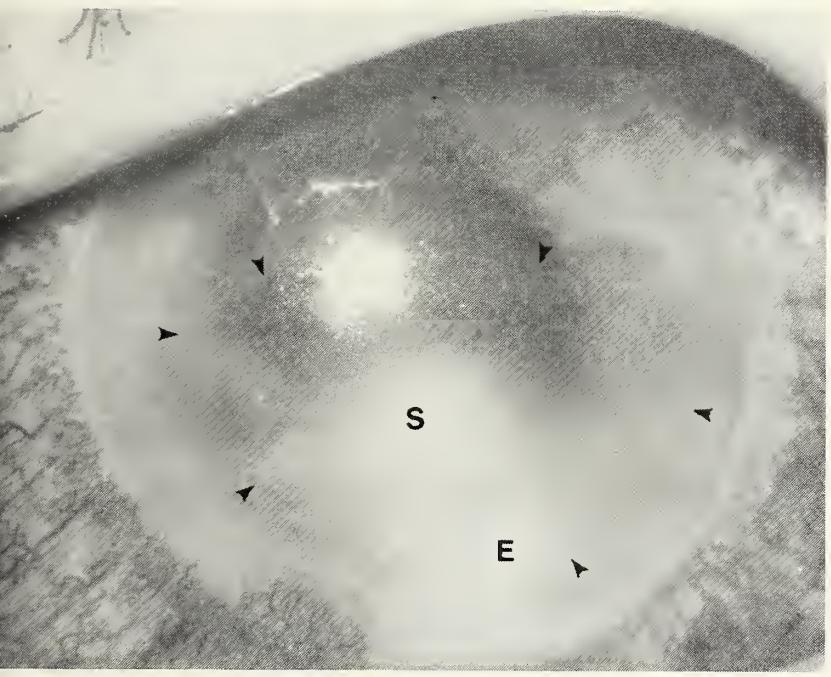


FIGURE 2

ic effects of anesthetic eyedrops on cornea and conjunctiva. junctival hyperemia, inferonasal corneal vascularization, chron- pithelial defect (edges delineated by arrows), stromal infiltrate without stromal ulceration, and endothelial plaque (E) of in- mmatory cells.

ed to obtain and to use it secret- His roommate reported that the ent had bottles of eyedrops hid- in his socks and in his briefcase that he had been instilling these lications in his left eye approxi- ely every 10 minutes since ad- sion.

When he was confronted with information, he expressed nei- hostility nor shame and blithely itted having regularly used pro- acaine drops since four days be- admission. We again empha- d that the anesthetic appeared to he sole cause of his ocular prob- , and now the patient expressed e doubt as to whether he could using the drug. A few hours r, because of "sudden, urgent, sonal business," he informed us he would sign himself out of hospital if he were not dis- rged. After exhorting him to stop the use of the anesthetic, we released him with instructions for the use of topical sulfacetamide, topical atropine, and an eye patch.

Upon leaving the hospital, he tried unsuccessfully to reclaim his confiscated bottles of proparacaine. He returned the next day—unimproved and without the patch. He failed to return thereafter, except that he was discovered a few days later hiding in our contact lens clinic when it was opened for the day's work.

Ten days later the patient presented himself to the emergency room of the nearby Wishard Memorial Hospital, giving a history of having had a particle of limestone beneath his left contact lens. He was sent to the hospital's eye clinic, and one of us (RHM) was called as a consultant. Upon seeing RHM, who had helped care for the patient during his hospitalization, the patient disappeared.

Medical information regarding the patient was subsequently requested by a physician in Oregon.

DISCUSSION

Misuse of topical ocular anesthetics, by physicians as well as by patients, continues to be a problem despite previous reports of cases similar to ours.[1-3] This patient, in fact, obtained his first bottle of proparacaine from his family physician, as treatment for a corneal abrasion.

The continual use, even for only a few days, of topical anesthetics can cause loss of the corneal epithelium and inhibition of the healing of epithelial defects. The numerous adverse effects of these drugs on corneal epithelial cells include:

- Destruction of mitochondria, rough endoplasmic reticulum, and tonofibrils;[4,5]
- Alterations of desmosomes,[4,5] intracellular proteins,[6] and cell-membrane permeability;[4,6]
- Impairment of cellular respiration[6] and osmotic stability;[7]
- Inhibition of cellular mitosis and migration;[2,8] and
- Disorganization of cytoskeletal elements.[7,9]

Loss of epithelial microvilli[4,5] results in instability and rapid breakup of the tearfilm, thus compounding the drying that results from decreased blinking secondary to corneal hypesthesia.

In severe cases, the foregoing changes are manifested clinically by the presence of a chronic, nonhealing epithelial defect with a rolled edge.[6]

Toxic effects are by no means limited to the epithelium, as was well demonstrated by our case. Deeper manifestations can include edema of the corneal stroma with folds of Descemet's membrane, ringlike or disciform cellular infil-

trates of the corneal stroma and endothelium, keratic precipitates, iridocyclitis, hypopyon, and hyphema.[1-3,9] Edema of the eyelids, conjunctival hyperemia and papillary hypertrophy, mucopurulent discharge, and corneal vascularization also may occur.

Continued use of the drug results in the development of tolerance to its ability to provide relief of pain. As pain increases, the patient is impelled to instill the drug still more frequently—but with progressively less effect insofar as relief of pain is concerned.

All of these problems are considered to represent direct toxic effects of topical anesthetics, although actual allergic reactions occur occasionally.[5,9] Allergies of the immediate type are characterized by the rapid onset, following instillation, of edema of the eyelids, conjunctival hyperemia and chemosis, and itching. Delayed hypersensitivity manifests itself as a slowly developing eczematous contact dermatitis of the eyelids and nearby skin.

The cornea that has been altered by the toxic effects of a topical anesthetic is a compromised tissue and, as such, is susceptible to infection by opportunistic microorganisms. Indeed, infection with *Staphylococcus aureus* and *Streptococcus viridans* may have occurred in our case, at least for a time. That such infection was not responsible for the clinical findings, however, was evidenced by the absence of necrosis of the corneal stroma, the lack of response to antibiotics that were selected in accordance with the results of sensitivity tests, the small numbers of organisms isolated and our inability to recover them regularly, and the apparent absence of organisms in microscopically examined corneal scrapings.

The question arises as to whether our patient's bizarre behavior might have been a manifestation of Munchausen's syndrome.[10] We thought not. The patient probably used the drops merely to obtain relief from pain rather than with the intent of producing disease and deceiving medical practitioners. It is clear now that some patients who use anesthetic eyedrops try to do so secretly because they fear that stopping the use of the drug will lead to intolerable pain.[3] Patients also may fail simply to mention that they are using the drops or may continue their use after medical advice to the contrary.[9]

SUMMARY

The abuse of a topical anesthetic should be considered in a patient with a history of minor corneal trauma, recurrent corneal erosions, or problems with contact lenses (even if the use of the drug is denied) when clinical findings include chronic epithelial defect with a rolled edge, reduced corneal sensitivity, stromal infiltration and edema without stromal ulceration, iritis, and cultures that are negative or inconsistent with the physical findings or response to antimicrobial therapy.

In addition to cessation of the drug, treatment consists of measures to decrease pain and to promote healing. Such measures might include the use of cycloplegic and lubricating agents, patching, therapeutic soft contact lenses, retrobulbar alcohol, antimicrobial therapy for secondary infection, systemic analgesic drugs, and perhaps tranquilizers or sedatives. Topical corticosteroids might provide some relief of pain and lessening of inflammation, but their effects are considerably less dramatic in toxic, as opposed to immunologic, reactions; and the numerous adverse effects of corticosteroids, including retardation of healing and lessened resistance to infection, must be respected. Hospitalization may be indicated. The worst cases might ultimate require keratoplasty[3] or the plac ment of a conjunctival flap over t cornea, although remarkable corr al clearing can occur for as long six months after the offending dr has been stopped.[9]

This case reemphasizes the ve real hazards of the chronic use topical ocular anesthetics. It is o belief that these drugs should v tually never be used for therapeu purposes and should not be pr scribed for use at home by patien

REFERENCES

1. Epstein, DL, Paton, D: Kerati from misuse of corneal anestheti *N. Eng. J. Med.* 279:396-399, 19
2. Willis, WE, Laibson, PR: Corn complications of topical anesthe abuse. *Canad. J. Ophthal.* 5:2 243, 1970.
3. Henkes, HE, Waubke, TN: Keratit from abuse of corneal anestheti *Brit. J. Ophthal.* 62:62-65, 1978.
4. Leuenberger, PM: Ultrastructure corneal epithelium after topical a esthetics. *von Graefe's Arch. Kl Exp. Ophth.* 186:73-90, 1973.
5. Harnisch, JP, Hoffman, F, D mitrescu, L: Side effects of lo anesthetics on the corneal epitheli of rabbit eye. *von Graefe's Ar Klin. Exp. Ophth.* 197:71-81, 19
6. Bryant, JA: Local and topical a esthetics in ophthalmology. *Su Ophthal.* 13:263-283, 1969.
7. Nicholson, GL, Smith, JR, Poste, Effects of local anesthetics on c morphology and membrane asso ated cytoskeleton organization BALB/3T3 cells. *J. Cell. Biol.* 6 395-402, 1976.
8. Smelser, GK, Ozanics, V: Effect local anesthetics on cell division a migration following thermal burns cornea. *Arch. Ophthal.* 34:271-2 1945.
9. Burns, RP, Forster, RK, Laibson, *et al* Chronic toxicity of local a esthetics on the cornea, in Leopol I.H., Burns, R.P. (eds.): *Symposiu on Ocular Therapy,* vol. 10. N York, John Wiley & Sons Inc., 19 pp 31-44.
10. Spiro, HR: Chronic factitious illnes Munchausen's syndrome. *Arch. Ge Psychiatry* 18:567-579, 1968.

CME QUIZ

Diverticular Disease of the Colon...

CONTINUED FROM PAGES 39-41

) OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the rrect answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana Univer- y School of Medicine, Division of Postgraduate and Continuing Medical Education, 1100 W. Michigan St., In- anapolis 46202.**

NSWER THE FOLLOWING:

Of the many factors involved in the genesis of diverticula of the colon, the most important is:
a. race
b. geography
c. diet
d. heredity
e. weather

Diverticular disease in people under age 60 years is now
a. more common than 10 years ago
b. equal to frequency in the elderly
c. very rare
d. often less severe
e. a different process

Acute diverticulitis is most often misdiagnosed as:
a. ulcerative colitis
b. acute appendicitis
c. pelvic inflammatory disease
d. viral gastroenteritis
e. amebic dysentery

Perforation of a diverticulum of the colon is most dangerous in
a. winter time
b. the young
c. the cecum
d. the elderly
e. the first attack

5. Early operation for perforative diverticulitis should be considered when
 a. the patient has had several attacks
 b. there is failure to improve with simple measures
 c. the patient is elderly
 d. the whole colon is involved
 e. there is fever and leukocytosis

6. The only absolute contraindication to colon resection, when indicated, is
 a. anemia
 b. localized peritonitis
 c. obstruction of the colon
 d. recent myocardial infarction
 e. age over 80 years

7. The risk of death from the complications of diverticulitis, as compared with the risk of elective operation, is
 a. about the same
 b. slightly less
 c. five times greater
 d. ten times greater
 e. not known

8. Progress in reduction of morbidity and mortality from diverticular disease of the colon will come from earlier treatment in the patient with
 a. intractability
 b. hemorrhage
 c. perforation
 d. obstruction
 e. heart disease

e following are answers to the CME quiz that appeared the October 1978 issue of THE JOURNAL. The article upon ich the questions were based was "Depression in the Elder- " by Susanne Blix, M.D., and Hugh C. Hendrie, M.B. Ch.B.

1. e
2. d
3. a
4. d
5. b

Complete this form to obtain verification for one hour of Category 1 AMA CME credit.

swer sheet for Quiz: (Diverticular Disease . . .)

1. a, b, c, d, e
2. a, b, c, d, e
3. a, b, c, d, e
4. a, b, c, d, e
5. a, b, c, d, e
6. a, b, c, d, e
7. a, b, c, d, e
8. a, b, c, d, e

wish to apply for one hour of category 1 AMA ntinuing Medical Education credit through the I.U. hool of Medicine. I have read the article and an- ered the quiz on the answer sheet above. I under- nd that my answer sheet will be graded confidentially, no cost to me, and that notification of my successful mpletion of the quiz (80% of the questions answered rrectly) will be directed to me for my application for e Physician's Recognition Award of the American edical Association. I also understand that if I do not swer 80% of the questions correctly, I will not be lvised of my score but the answers will be published a later issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before March 15, 1979, to the address appearing at the top of this page.

BOOK REVIEWS



Current Obstetric & Gynecologic Diagnosis & Treatment

Ralph C. Benson, M.D., and 41 association authors. Second edition, Copyright 1978, Lange Medical Publications, Los Altos, Calif. 94022. 942 pages plus index of 32 pages. $18.00. Dr. Benson is Clinical Professor of Obstetrics and Gynecology and Emeritus Chairman, Department of Obstetrics and Gynecology, University of Oregon Health Sciences Center, Medical School, Portland, Oregon.

As stated in the preface, it is the policy of the publisher to offer revised editions of this book every two years—and indeed the first edition appeared December 1976. This revision includes essentially new chapters on contraception, family planning and infertility and substantial changes in the sections on menstruation, vulvar and vaginal diseases, endometriosis, emotional aspects of pregnancy, laparoscopy, uterine prolapse, and rape. All these show the "trend of the times", medically speaking.

In 1971, I reviewed "Handbook of Obstetrics and Gynecolgy", 4th edition, by Ralph C. Benson, M.D., 753 pages plus index, Lange Medical Publications, $6.50, in this journal (October). It was illustrated, very well indeed, by Laura V. Schaubert, so that the text and illustrations were happily correlated. The present book is also well illustrated, by Schaubert and also from a good many other sources, some of which receive credits in the legend, but nowhere can I find mention of Schaubert except where she has initialed or signed her own work. In my opinion, good medical drawing are superior to photographs for explainin structure (anatomy) and procedure (surgery) Color photographs may be superior for ski lesions, eye grounds and the like, but fo teaching purposes a good drawing simplifie the problem and leaves out extraneous ma terial. Laura Schaubert's work is excellent, an I hope will be recognized where used again.

I would say the authors have actuall achieved the purpose avowed in the preface "to make choices and restrain verbosity.' Clarity has been preserved, although occasion ally the verbosity is so restrained one must rea the sentence twice to be certain of the mean ing. However, he finds all that is necessary i really there. To my mind this is a sad com mentary on what we have become used to i medical literature: a redundancy added on t clarify preceding gobbledygook, usually all i one sentence. I have, of course, not read th entire text of this work, but those parts I *hav* perused are examples of good English wel adapted to scientific subject matter.

This book is well bound and printed, wit a flexible plastic cover which I, personally, lik better than a hard cover—more durable tha a paper cover, probably by ten to one. Th price is right.

A. W. CAVINS, M.D
Gynecologist
Terre Haute

CME PRE-TEST

Hypoglycemia in the Diabetic

The following true-false questions are presented to the CME reader as a pre-test. The article upon which the questions are based, "Hypoglycemia in the Diabetic," by Charles M. Clark, M.D., will be published in The Journal next month. New questions for Category 1 credit will appear with the article. The purpose of this pre-test is to aid CME evaluators in determining the effectiveness of CME articles in improving the knowledge of physicians reading them. Please indicate your responses on the answer sheet below.

Reactive hypoglycemia may occur in patients who subsequently develop diabetes.

Insulin concentrations during a 5-hour glucose tolerance test are extremely helpful in the diagnosis of reactive hypoglycemia.

In pituitary and adrenal insufficiency, hypoglycemia results from increased peripheral sensitivity to insulin and decreased hepatic glucose output.

Extrapancreatic tumors cause hypoglycemia primarily by their ectopic secretion of insulin.

In general, hypoglycemia associated with oral hypoglycemia agents occurs in the first few days of therapy.

The most common historical finding in diabetic patients who have hypoglycemia secondary to oral agents is that of reduced food intake.

The typical patient with hypoglycemia secondary to oral agents is elderly and has renal or hepatic disease.

Careful monitoring of juvenile diabetic patients reveals that most of them have frequent nocturnal hypoglycemia.

9. In spite of all the possible causes of hypoglycemia in the insulin dependent diabetic, the most common causes are: increased exercise, decreased food intake, or errors in insulin dosages.
10. Factitious hypoglycemia secondary to oral agents is rare and easily diagnosed.
11. The presence of antibodies to insulin in a patient never given therapeutic insulin establishes the diagnosis of factitious hypoglycemia.
12. Low C-peptide values in the presence of high immunoreactive insulin values suggest that an islet cell tumor is present.
13. The only laboratory tests which will conclusively establish the diagnosis of factitious hypoglycemia secondary to oral agents is the C-peptide level.
14. Glucagon is not a very effective way to treat insulin induced hypoglycemia.
15. Hypoglycemia secondary to the shorter acting oral hypoglycemia agents usually lasts less than 4 hours.

swer sheet for Pre-Test: (Hypoglycemia . . .)

T	F	6.	T	F	11. T F
T	F	7.	T	F	12. T F
T	F	8.	T	F	13. T F
T	F	9.	T	F	14. T F
T	F	10.	T	F	15. T F

Name (please print ar type)

Address

Identification number (found abave yaur name on mailing label)

Signature

tegory 1 AMA Continuing Medical Education credit for s pre-test quiz will not be granted; results will be used evaluation purposes only. Category 1 credit will, wever, be granted for successful completion of the st-test, which will appear in the February issue of e Journal.

Complete and clip the application form and mail it to: **Indiana University School of Medicine, Division of Postgraduate and Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46202.**

BOOK REVIEWS

The Social Security Retirement Test—Right or Wrong?

Marshall R. Colberg, Copyright 1978. American Enterprise Institute for Public Policy Research, 1150 Seventeenth St., N.W., Washington, D.C. 20036. 57 pages, $2.75.

This is an interesting and comprehensive survey of the Social Security program. Although it is not a truly medical publication, its widespread implications and involvement of everyone in the country, including the medical profession, makes it a "must."

The Social Security Act was signed by President Franklin D. Roosevelt Aug. 14, 1935. Its main objective was to provide an insurance or annuity program for workers once they reached 65. Payments were to be monthly, as they still are. In theory, the program was to establish a "bank account" for the employee which he could draw on once he was no longer a member of the work force. But since those days many amendments and changes have been instituted, all on the basis of a "test" procedure. But, for the most part, a forfeiture or penalty on the elderly individual has resulted.

What is needed is justice for the elderly. The fastest growing segment of the U.S. population is the group over the age 65. As of 1978 this group consisted of 22.4 million men and women. At present death rates, the number of persons over 65 is expected to increase by 40% by the year 2000, swelling the size of this group to 31 million persons. Therefore, by th year 2000, 11.7% of the U.S. population wil be over 65.

With this increase in the number of olde persons, the chronic health problems prevalen in this age group will become an additional cos factor. During the mid-1970s approximatel $90 billlion was spent for personal health care but only about 30% of this was spent for olde persons. While Medicare and Medicaid ar helpful to the aged, these government pro grams need to be strengthened and the variou changes taking place continuously should b directed away from the elderly segment, whic is being penalized. The limitations on earning —the retirement test—is probably the mos unfair provision of the "old age and survivor insurance"—OASI.

The entire history, the legislative attempt at amendment, the effort to eliminate th Social Security test at age 65, the effort to re duce the cost of the program, and the exper summation of the system have been completel and expertly explained in this publication. advise that all persons in the country, regard less of age, review this for a better understand ing of the far-reaching implications.

IRVIN W. WILKENS, M.D
Internist
Indianapolis

Proceedings of the Aspirin Symposium

From Proceedings of the Royal Society of Medicine, Vol. 70, No. 7, November 1977. Supplement #7. Copies available free of charge from Aspirin Foundation, 1 Roberts Mews, Lowndes Place, London SW1.

The Europeans seem to have a propensity for symposia concentrating on one small aspect of a disease, or in this case, one therapeutic entity. This is a slim magazine of 36 pages and apparently one of a continuing series of Royal Society of Medicine Proceedings. The fact that aspirin has lately enjoyed a renaissance, particularly being recognized as yet the premier antirheumatic and also as an anticoagulant, underlies this seminar held at the Royal College of Surgeons building, London.

There are seven papers with discussions con cerning its possible negative effect as a pre cursor of upper gastrointestinal hemorrhage its role as an antirheumatic and especially it use as a preventive for phlebitis, stroke an coronary thrombosis (incidentally, for this last they state that 1 gram per day is necessary).

Aspirin was synthesized about 80 years ag and has been proven to be a most protea medicine, growing in importance yearly.

RODNEY A. MANNION, M.D
Urologist
LaPorte

BOOK REVIEWS

eview of Medical Microbiology

Ernest Jawetz, M.D., Joseph Melnick, Ph.D., Edward Adelberg, Ph.D. 13th edition, Copyright 1978, Lange Medical Publications, Los Altos, Calif. 94022. 550 pages, $12.00.

This freely illustrated paper-back volume, which is updated each year, has become a frequently used resource for this reviewer in the fields of both microbiology and immunity. Because its material is condensed, authoritative and up-to-date, it must be useful to nearly every primary physician who has examined it, and of particular value to medical students and house officers. The authors have achieved a happy mix of practical, factual knowledge usable at the bedside with a discussion of the relevant basic science aspects.

While the discussion of Legionnaires' disease, for instance, is short, not covering more than a half page, most of the facts known about it are included and the speculations are omitted.

In the section on mycobacteria, the tubercle bacillus, its invasive characteristics and differentiation from other mycobacteria are described in considerable detail, but the reader is also informed on the epidemiology, treatment of the active disease and preventive control.

For the physician whose basic instruction in immunology goes back 10 or more years ago, the condensed differentiation between T and B lymphocytes, the short paragraphs and tables showing the characteristics of the different immunoglobulins, and the illustrations of the present concepts of IgG molecules, all contained within a space of four pages, are very helpful in his efforts to get abreast of modern views. The total section, covering most of what the practitioner needs to know, is covered in 69 pages.

In diagnosing and treating infectious disease of most any kind, the practitioner of medicine will be agreeably surprised to find in this volume most of the clinical as well as basic information he requires to handle adequately the day-to-day problems he encounters.

PAUL S. RHOADS, M.D.
Internist
Richmond

he Heart Patient Recovers

Sydney H. Croog, Ph.D. and Sol Levine, Ph.D., with foreword by William B. Kannel, M.D. Human Sciences Press, 72 Fifth Ave., New York, N.Y. 10011. Copyright 1978.

This book approaches a subject often neglected by physicians and students alike: the psychological effects of heart disease on patients and their families.

The book offers insight into various life situations affecting patients after recovery from the immediate effects of an acute myocardial infarction. Employment and work experiences in relation to social status and occupational types are examined, with special attention on motivational and return to pre-infarction work conditional differences between categories ranging from the executive to the blue-collar worker. Special attention is given to support groups, including family, friends, religious organizations and personal physicians. Psychological and personality changes are examined in some detail in depth.

The authors have approached an often ignored but important subject in a scientific and well organized manner. I feel strongly that all physicians at every level of training should familarize themselves with the problems approached in this book.

It is a pleasure to read a book which is well written and informative on a subject that has received relatively little attention in the current subspecialty literature.

CASS A. PINKERTON, M.D.
Cardiologist
Indianapolis

FUTURE FILE

CME Congress in Illinois

The Illinois Council on Continuing Medical Education will sponsor a Congress on CME April 6-7 at the Oak Brook Hyatt House, Oak Brook, Ill. Its theme relates to the basics of CME program planning: Planning a CME Program That Works; What to Present; Checking for Effectiveness.

For information, write to the ICCME at 55 E. Monroe St., Suite 3510, Chicago 60603.

Journey to the Orient

A journey to five Far East countries next June for the study of oriental health care will be sponsored by Brevard Community College of Florida. Allied health and nursing professionals will visit Japan, Hong Kong, People's Republic of China, South Korea and Taiwan to observe health education, facilities, treatments, delivery systems and services. Approximate cost is $2,000. Departure date will be June 9. For information, write Dr. Corinne B. Linton, 1519 Clearlake Road, Cocoa, Fla. 32922.

Pediatric Dermatology Seminar

The sixth annual Pediatric Dermatology Seminar will be held in Darwin's Galapagos Islands, Feb. 17-25, aboard the M/V Buccaneer, a luxury ship. Daily lectures and discussions will be led by Dr. Guinter Kahn of Miami Beach.

For more information about the seminar, contact Dr. Kahn at 16800 N.W. 2nd Ave., No. Miami Beach, Fla. 33169.

ISMA Calendar of Events

At press time, the following meetings, to be held at ISMA headquarters, had been slated for the first quarter of 1979:

Jan. 13—Subcommission on Insurance
Jan. 14—Board of Trustees
Jan. 16—ISMA Auxiliary Board
Jan. 18—Impaired Physician Peer Review Committee and Advisory Committee
Jan. 21—Section of Medical Directors and Staff Physicians of Nursing Facilities
Jan. 28—Commission on Legislation
Feb. 4—Commission on Medical Education
Feb. 4—Subcommission on Accreditation
Feb. 4—Commission on Medical Services
Mar. 4—Board of Trustees

Non-Internal Medicine Topics

The Medical University of South Carolina will conduct a CME course consisting of nine non-internal medicine topics for the general internist at the Mil Hyatt House Hotel in Charleston March 7-9.

The program is approved for 17½ AMA Categor 1 credit hours. Tuition is $125.

Write to Gail M. Hogan, Division of Continuin Education, MUSC, 171 Ashley Ave., Charleston, S.C 29403.

Practical Office Dermatology

"Practical Office Dermatology for the Primary Ca Physician" will be the subject of a three-day course a the Las Vegas Hilton Hotel, Las Vegas, Nev., Fel 16-18.

The course is sponsored by the American Academ of Dermatology and the University of Nevada Schoo of Medical Sciences. It is rated for 12 AMA Categor 1 credit hours. Tuition is $150.

Applications are available from the American Acad emy of Dermatology, P.O. Box 552, Evanston, Il 60204, tel: (312) 869-3954.

Polytomography of the Temporal Bone

The 20th two-day symposium on Polytomography o the Temporal Bone will be conducted at Communit Hospital in Indianapolis April 21-22 under the auspice of The Wright Institute of Otology.

This CME activity meets the criteria for 12 credi hours of Category 1 of the AMA's Physician Recogni tion Award. Fee for the course is $250.

Subjects covered will be basic anatomy of the tem poral bone and technique of polytomography of th temporal bone, with demonstrations of normal tomo grams. Pathological conditions revealed by polytomo graphy—cholesteatoma, ossicular chain problems otosclerosis, fractures, foreign bodies, tumors, con genital anomalies—will be shown or original tomo grams and the clinical applications will be discussed.

Direct inquiries to The Wright Institute of Otology Inc., Community Hospital of Indianapolis, 1500 N Ritter Ave., Indianapolis 46219, or call (317) 353-5679

Urologic Cancer Conference

The American Cancer Society will conduct a na tional conference on urologic cancer April 4-6 at th Los Angeles Hilton Hotel.

For details, write the Society at 777 Third Ave., Nev York City 10017.

ichigan CME Offerings

The following courses are sponsored by the Uni-rsity of Michigan Medical School and meet criteria Category 1 credit. For further information, contact university's Department of Postgraduate Medicine d Health Professions Education, The Towsley Center Continuing Medical Education, Ann Arbor, Mich. 109.

March 2: Care of the Burned Patient;
March 6-9: Hematology Review;
March 14-16: Advances in Pediatrics;
March 22-23: General Surgery;
March 26-27: Arthritis Patient Education;
April 2-27: Surgical Anatomical Review;
April 16-20: Family Practice Review;
April 24: Continuing Pathology.

edical Ethics Symposium

The Harry S. Abram Memorial Symposium on rontiers in Medical Ethics: Application in a Medical tting" will be held Feb. 14-15 at the Vanderbilt Uni-rsity School of Medicine, Nashville, Tenn.

The symposium, presented by the school's Department of Psychiatry and Division of Continuing Education, will be directed to increasing awareness of the extent to which medical decisions involve humanistic value dimensions, to incorporating value dimensions into medical decision-making, and to increasing community awareness in this regard.

Ten credit hours in Category 1 of the Physician Recognition Award of the AMA will be granted for attendance.

For further information, contact the school's Division of Continuing Education, tel: (615) 327-2634.

Indiana University CME Courses

March 7-8: Current Topics in Internal Medicine;
March 28-29: Pediatric Pulmonary Conference;
April 18: Arthur B. Richter Child Psychiatry Conference;
April 18-19: Pharmacology Review (Richmond);
April 25: Dermatology for the Primary Care Physician.

For information, write or call the Indiana University School of Medicine, Division of Postgraduate Medical Education, 1100 W. Michigan St., Indianapolis 46202. Tel: (317) 264-8353.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

Since 1899

THE

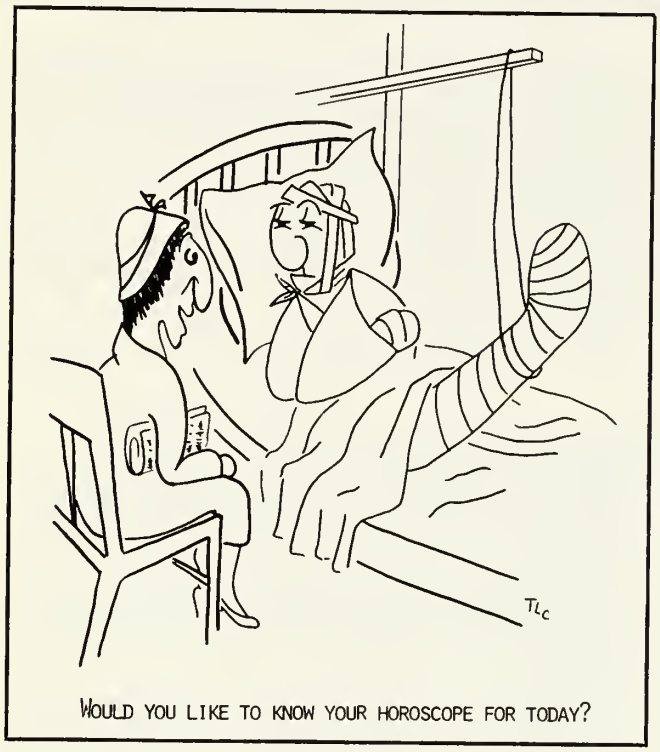
MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
1810 Broad Ripple Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indianapolis 46220

Northern Indiana Office: Douglas O. Sellan, Representative
120 LaSalle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332

NEWS NOTES



WOULD YOU LIKE TO KNOW YOUR HOROSCOPE FOR TODAY?

No Toll-Free Number for CHAMPUS

The new CHAMPUS contractor for Indiana and Kentucky, Blue Cross of Southwestern Virginia, will NOT have a toll-free telephone number as originally announced. Their headquarters, in Roanoke, Va., can be reached at 703-989-3384 or 703-989-3385. The new CHAMPUS contract went into effect Sept. 15.

Stress Booklet Available

"Stress!" is the title of a self-help instructional booklet designed to help people learn how to deal with the tensions and pressures of everyday living. Single copies are available at no cost from the Promotion Department, American Hospital Association, 840 N. Lake Shore Drive, Chicago 60611. It is also available in lots of 50 at $18.75 per lot.

New Newsletter for Physicians

"Regulatory Affairs/M.D." is a new bi-monthly newsletter for physicians. It will serve to keep health professionals informed of FDA, legislative and regulatory developments affecting health-care products. The editor, Carol Frankel, has over 12 years experience as an FDA inspector, as Director for Regulatory Affairs for two major health-care organizations, and as a consultant in regulatory affairs.

"You and Your Doctor" Pamphlet

Hot off the press is a new ISMA-produced pamphlet, "You and Your Doctor." It deals with selecting a personal physician, fees and house calls, examinations and consultation, and health insurance. It is intended primarily for distribution to newcomers. Initially, copies have been sent to each county medical society for review, in hopes that they will be found acceptable for distribution to Welcome Wagons and Chambers of Commerce. Many other uses are anticipated. Requests for the pamphlet, developed by the ISMA Commission on Public Relations, should be addressed to the Director of Communications, ISMA, 3935 N. Meridian St., Indianapolis 46208.

Special Issue Available

The November issue of JOURNAL OF VISUAL IMPAIRMENT AND BLINDNESS is devoted to articles on diabetes, retinopathy, psychological upsets and rehabilitation. Single copies are available at $1.25 in print, braille or recorded form. Write American Foundation for the Blind, 15 W. 16th St., New York City 10011.

The Williams & Wilkins Co.

Baltimore, Maryland

We are proud to announce that George Hood is our new sales representative for Illinois, Indiana, and Wisconsin.



George W. Hood
15127 Las Flores Lane
Oak Forest, Il. 60452
(312) 687-9011

George is eager to supply you with books and journals from Williams & Wilkins as well as titles from Lea & Febiger and Little, Brown.

Please look for George's display in your hospital or call him at home for prompt service.

George will be happy to accept your Master Charge or VISA card for any Williams & Wilkins; Little, Brown; and Lea & Febiger title.

NEWS NOTES

romosome Morphology Kit

'Preparation of the Normal Karyotype" is taught by programmed learning package produced by the erican Society of Clinical Pathologists. A workbook, audiotape and 35mm slides with script and a prac- board constitute the instructor's kit, priced at $50. student's set contains a script, the workbook, and ctice board only and sells for $8. Additional info y be obtained by writing the Society at P.O. Box 065, Chicago 60612.

5,000 Grant

The Lobund Laboratory of Notre Dame University receiving an $85,000 grant from the Fannie E. ppel Foundation for research on cancer and heart ease. The grant will permit purchase of special uipment for germ-free research. One project will in- re into the influence of gut bacteria on cholesterol tabolism.

etting in 'STEP'

The Indianapolis Museum of Art's State Traveling hibition Program (STEP) is outlined in a free bro- ure, a copy of which may be obtained by writing the useum at 1200 W. 38th St., Indianapolis, 46208. elve exhibitions are described, and the method of taining an exhibit is outlined. Last year 44 Indiana wns and cities received a STEP show. Sponsoring ganizations are asked to pay only costs of transporta- n and insurance.

peaks on Huntington's Disease

At the invitation of the National Institute of Mental ealth, Dr. Ott B. McAtee, superintendent of Madison ate Hospital, recently addressed members of the In- tute on "Further Experience in the Diagnosis and eatment of Huntington's Disease at the Madison State ospital." He noted that the incurable hereditary dis- se is prevalent in southeastern Indiana.

PR Training for Pam Am Crews

Pan Am flight service crews are being trained in rdiopulmonary resuscitation (CPR). Twenty pursers d flight attendants were given an instructor training urse by the Hawaii affiliate of the American Heart ssociation and are now training personnel at Pan Am ses around the world. By the end of the third quarter 1979 it is expected that all 4,000 Pan Am flight at- ndants will be CPR qualified.



NEVER MIND HOW IT HAPPENED. JUST CANCEL TODAY'S APPOINTMENTS.



HANGER PROSTHESES OFFERS BOOKLET ON AMPUTATIONS

This booklet hos been designed for those physicions whose practice includes amputation. Limb Prosthetics gives reody reference for eoch site of amputation os well os the prostheses recommended for each site.

Over 100 yeors of experience goined by the Honger organizotion have gone into this carefully illustrated booklet. Illustrotions include omputotion sites for the leg ond the arm, various Honger prostheses and methods of suspension, post-operotive care ond preparotion for prosthesis, plus selected photogrophs showing the child amputee ond troining for the above-knee patient.

We believe thot you will find Limb Prosthetics o most useful booklet and o valuoble source of quick information. To obtoin your copy, please write or phone the Honger office nearest you.

Hanger PROSTHESES

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807

NEWS NOTES

Tel-Med Active in Gary

Tel-Med, a service featuring tape-recorded messages that deal with numerous medical and health problems, has been inaugurated in Gary, thanks to sponsorship by Gary Methodist Hospital and a grant from Gary National Bank. The messages, ranging in length from 3 to 7 minutes, deal with everything from hypoglycemia and breast cancer to ulcers and glaucoma.

The service, free of charge, is available by dialing a certain Gary telephone number. The system, operated by a local answering service, has five incoming phone lines taking calls on a rotating basis 24 hours a day. Brochures explaining the system and listing the 300 tapes soon will be available in doctors' offices, hospitals and at area supermarket check-out counters.

ISMA formerly operated Tel-Med for the entire state.

Here and There . . .

. . . **Dr. Larry G. Cole,** Yorktown, has been elected coroner of Delaware County.

. . . **Dr. Harry L. Staley,** Bluffton, has been named a diplomate in rheumatology by the American Board of Internal Medicine.

. . . **Dr. R. J. Doherty,** Merrillville, has been installed as president of the medical staff, Methodist Hospital of Gary; **Dr. Leo Roth** has been named president-elect; **Dr. Ramakrishnan Unni,** secretary; and **Dr. Bassem Atassi,** treasurer.

. . . **Dr. Destry W. Lambert,** Tipton, has been appointed to a second four-year term as Tipton County health officer.

. . . **Dr. Joseph M. Black,** Seymour, has received the 1978 Z. G. Clevenger Award of Indiana University's I-Men; the award is given to alumni who have made outstanding contributions to I.U's athletic program and the I-Men's Association.

. . . New officers of the Indiana Philippine Medical Association are **Dr. V. G. Sison,** Terre Haute, president; **Dr. C. Archangel,** Jeffersonville, president-elect; **Dr. L. Ramos,** Clarksville, secretary; and **Dr. T. Garcia,** Indianapolis, auditor.

. . . **Dr. Max S. Norris,** Indianapolis, has been named chairman of the Butler University board of trustees.

. . . **Dr. Dwight W. Schuster,** Indianapolis, has been appointed to the new state Board of Mental Health.

. . . **Dr. Barbara J. Krueger,** Huntington, has been elected president of the Huntington County Association for Retarded Citizens; **Dr. Piyush J. Shah,** also of Huntington, was elected treasurer.

. . . The Floyd County Medical Auxiliary recently presented $1,500 to the New Albany-Floyd County Schools for the purchase of mannequins to be used for classroom CPR training.

Helping the Blind

How should a sighted person guide a blind perso A new film answering that question is available fro the American Foundation for the Blind. Called "T Seven-Minute Lesson (Acting as a Sighted Guide)," is designed for service clubs, church groups, school businesses and other groups interested in the subje The film may be purchased for $60 or rented for $1 Write the Foundation at 15 W. 16th St., New Yo City 10011.

10,000-Title Directory

Indiana University School of Medicine Library pu lishes a listing of over 10,000 distinctive health scienc serial titles held by 16 hospital, academic, corporat and governmental agency libraries in the Indianapol area. It is an essential tool for interlibrary loan patro of the participating libraries. All Indiana hospital an academic libraries, and all Indiana public library tel type centers will have copies. Additional copies may b purchased for $7, which covers cost of printing an shipping. The title of the 1978 directory is HESS Write the I.U. Library at 1100 W. Michigan St., In dianapolis 46202.

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Immediate delivery on many 1979 models

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594

NEWS NOTES

ıergy Saver

A Veterans Administration 60-bed nursing home Delaware is to be warmed in the winter and cooled the summer by an "Annual Cycle" Energy System CES). A heat pump warms the home by extracting at from a 20,000 cubic foot water tank, gradually rning the water into ice. During the summer the ice melted to serve as an air conditioning unit. Except r the power necessary to run the pump, no energy required.

est Research Paper

Dr. William R. Keye, Jr., Bluffton, recently won the ard for the best research paper presented at the 49th nual meeting of the Central Association of Obstetri- ans and Gynecologists. His paper, "Prolactin-Secreting tuitary Tumors in Women," was selected from the papers submitted for presentation at the meeting. r. Keye is a member of the Caylor-Nickel Medical enter staff in Bluffton.

Fellowships

The following ISMA members have been admitted to Fellowship in the organizations indicated:

International College of Surgeons:
Dr. Oscar G. Limcaco, Terre Haute;
Dr. William J. Ryan, Columbus;
Dr. Kirby B. Tarry, Columbus.

American College of Surgeons:
Dr. David L. Bechtold, South Bend;
Dr. Gary L. Miller, Logansport;
Dr. Brian D. Saine, South Bend;
Dr. Vincent C. Scuzzo, South Bend;
Dr. Leroy A. Smith, Michigan City.

American College of Chest Physicians:
Dr. Charles A. Waltz, Franklin.

American Academy of Family Physicians:
Dr. M. James Black, Brownsburg;
Dr. William A. Edwards, Plainfield;
Dr. Lau Tran, Linton;
Dr. Dean L. Mattox, LaGrange;
Dr. Rosemary Weir, Seymour.

Physician Recognition Awards

The following Indiana physicians are recent recipients of the AMA's Physician Recognition Award. This award is official documentation of Continuing Medical Education hours earned, and is acceptable proof in most states requiring CME in re-registration that the mandatory hours of CME have been accomplished.

nderson, James Twyford, Greenfield
acker, M. Barbara, La Porte
all, Margaret J. Hitzeman, Ft. Wayne
ate, Mostafa Hashem, Indianapolis
ill, Robert O., Indianapolis
lack, Thomas Houston, Greencastle
lichert, Peter A., Ft. Wayne
uehner, Donald F., Evansville
urt, Robert William, Indianapolis
ook, Robert Gibson, Bluffton
as, Amal Kumar, Kokomo
rake, James Richard, Anderson
alante, Gloria, Munster
iesting, Jerome Richard, Ft. Wayne
onzalez, Alfredo B., Indianapolis
Iastings, Warren C., Ft. Wayne
Iigdon, Chester Francis, Evansville
Jackson, Dean B., Angola
Johnston, Gerald Patrick, Indianapolis
Jones, Thomas Arthur, Indianapolis
Kincaid, Raymond Keith, Tipton
Klein, Johnny Carl, Indianapolis
Kolettis, John George, Merrillville
Kurlander, Gerald Jay, Indianapolis
Lopez, Filemon Pasion, Dyer
Mandel, Darrel Sheldon, Indianapolis
Manning, George C., Ft. Wayne
Marshall, Wilbur James, Munster
Maschmeyer, Robert Henry, Zionsville
McCalla, Charles X., Paoli
Michael, Isaac Eldrew, Indianapolis
Mok, Ying Bung, Evansville
Muhler, Joseph Charles, Ft. Wayne
Nasr, Amin Toufic, Muncie
Norton, Horace, Washington
O'Brian, Earl J., Indianapolis
Ochsner, Edward Conner, Danville
Pena, Adela Peralta, Munster
Rahdert, Richard F., West Lafayette
Ratcliffe, A. Wayne, Evansville
Razek, Aly Abdel, Evansville
Records, John Merritt, Franklin
Robbins, Gordon Thomas, Zionsville
Scales, Allen Dearing, Huntingburg
Scamahorn, Malcolm O., Pittsboro
Scheimann, Lois A. Grieder, Valparaiso
Sharp, Thomas Wayne, Bloomington
Sheeler, Gary Lee, Auburn
Ulgado, Edmundo Silvano, Connersville
Weiskopf, Henry S., Merrillville
Worley, Joseph Paul, Indianapolis
Young, Steven Robert, Indianapolis

PHYSICIANS' DIRECTORY

INTERNAL MEDICINE

Offices for the doctors listed below are located at 3130 N. Meridian St., Indianapolis 46208; the switchboard number is 317-927-1221.

MERIDIAN MEDICAL GROUP

CARDIOLOGY
Richard M. Nay, M.D.
Warren E. Coggeshall, M.D.
Richard R. Schumacher, M.D.
William C. Elliott, M.D.

HEMATOLOGY—ONCOLOGY
Laurence H. Bates, M.D.
William M. Dugan, M.D.
James E. Schroeder, M.D.
Frank A. Workman, M.D.
Deborah S. Provisor, M.D.
Pediatrics

METABOLISM AND ENDOCRINOLOGY
William M. Holland, M.D.

GASTROENTEROLOGY
Robert D. Pickett, M.D.
B. T. Maxam, M.D.
Lee G. Jordan, M.D.
Martin P. Meisenheimer, M.D.

INTERNAL MEDICINE
Hunter A. Soper, M.D.
Douglas H. White, Jr., M.D.
Michael B. DuBois, M.D.
Nephrology
Michael P. Bubb, M.D.
Robert L. Iverson, Jr., M.D.
Critical Care
Michael Zeckel, M.D.
Infectious Diseases

INFECTIOUS DISEASES
Thomas G. Slama, M.D.

NEUROLOGY
Norman W. Oestrike, M.D.
Charles Rehn, M.D.

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Ahearn, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegeman, M.D.
Douglas F. Johnstone, M.D.
LeRay H. King, Jr., M.D., FACP

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capital, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurological Surgery

1815 North Capitol Avenue Indianapolis 46202

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY
5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Training for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

HAND SURGERY

By appointment Phone 317-783-1319

VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.
Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery

3530 S. Keystone, Suite 305 Indianapolis 46227

PHYSICIANS' DIRECTORY

PSYCHIATRY

JOHN H. GREIST, M.D.

Diplomate, Baard of Neuralagy and Psychiatry

Specializing in Psychiatry

3231 North Meridian Street Indianapolis 46208

GORDON T. BROWN, M.D.

Diplomate, American Baard af Psychiatry and Neurology

Adult and Adalescent

Psychotherapy, Consultatian, Evoluation

Tel: (317) 923-3269

3266 North Meridian Street Indianapolis 46208

ALLERGY

INDIANA ASTHMA & ALLERGY ASSOCIATES

Specializing in Chranic Severe Asthma

and

Adult and Pediatric Allergic Disarders

D. Duane Houser, M.D., Inc.

(317) 923-7650

and

Douglas J. Horton, M.D.

(317) 923-6990

1815 N. Capital Avenue

Indianapolis, Indiana 46202

Diplomates, American Baard of Allergy & Immunalagy

Answering Service 926-3466

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
PAUL M. FLANAGAN, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

CARDIOLOGY

William K. Nasser, M.D. and Michael L. Smith, M.D. are pleased to announce the addition of Cass A. Pinkerton, M.D. for the practice of cardiology and cardiac catherization.

8402 Harcourt Road, Room 413
St. Vincent's Professional Building
Indianapolis — (317) 257-9316

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.

Certified: American Baard of Colon and Rectal Surgery
Associate Fellaw: American Society of Colan and Rectal Surgeons
Specializing in Calan and Rectal Surgery

214 Sherland Building
105 Eost Jefferson Blvd. South Bend, Ind. 46601

OBITUARIES

Herman G. Baker, M.D.



Dr. Baker, 89, one of Evansville's most distinguished physicians, died Nov. 9 at St. Mary's Medical Center in Evansville.

Dr. Baker was the oldest surviving past president of ISMA, elected to that office in 1937 and serving in 1938.

His life was one of "firsts:" he was Evansville's first internal medicine specialist, he was the first resident at Old St. Mary's Hospital, and he brought the first blood pressure instrument to Vanderburgh County. He was an early developer of the Rehabilitation Center in Evansville, and in 1921 he founded the Lancet Club for continuing medical education.

Dr. Baker spent four years in the Army during World War I, serving under General Pershing, and was retired as a Medical Corps lieutenant colonel. Following his return to Evansville, his first task was the conversion of Boehne Camp to Boehne Hospital, an accomplishment that took two years to complete.

During his career, Dr. Baker served both locally and nationally in many areas of community service. He was a former president of the Vanderburgh County Medical Society, a member of the board of the American Red Cross and civilian adviser to the military commander during the 1937 flood, serving also as a liaison to the U.S. Public Health Service, Gov. Clifford Townsend, and the American National Red Cross Disaster Relief. In addition to being a member of the National Health Conference called by President Roosevelt, he served as a consultant on medical care to the Public Health Service and as a member of its Medical Advisory Committee. From 1941 to 1945 he was chairman of the Indiana State Board of Health. In Evansville, he was a director of the Chamber of Commerce, the Southwestern Indiana Heart Association and the Crippled Children's Society, and a life member of the University of Evansville Board of Trustees.

Although he retired from active practice in 1970 at the age of 81, he subsequently was named director of medical services for the Little Sisters of the Poor, was appointed distinguished consultant to the I.U. School of Medicine, and the medical library at St. Mary's was named after him. In 1972 the Indiana Society of Internal Medicine named him Internist of the Year.

Daniel D. Stiver, M.D.

Dr. Stiver, 70, a prominent South Bend surgeon, died Nov. 27 at Memorial Hospital in South Bend.

A native of Indiana, Dr. Stiver was graduated from the Indiana University School of Medicine in 1936, and completed a medical residency in surgery at I.U. He had been in practice in South Bend since 1940.

Dr. Stiver, a member of the American College of Surgeons, served in the Army Medical Corps during World War II.

Altamont H. Bracey III, M.D.

Dr. Bracey, 40, president of the Tippecanoe County Medical Society, died Nov. 22 at M. D. Anderson Hospital, Houston, Tex. He had been ill eight months.

Dr. Bracey, a 1965 graduate of the Medical College of Virginia, had been a pediatric surgeon at the Arnett Clinic in Lafayette since 1974.

He was a surgical fellow of the American Academy of Pediatrics and a fellow of both the American College of Surgeons and the American Pediatrics Surgical Association.

Garre E. Blair, M.D.

Dr. Blair, 31, of Vevay, died Nov. 10 in Norton Children's Hospital in Louisville. He died following injury in an automobile accident.

Dr. Blair, a native of Delaware County, graduated cum laude from Indiana University School of Medicine in 1974 and was a family practice resident at Ball Memorial Hospital in Muncie before opening his practice in Vevay. He recently completed certification for a specialty in family practice.

He was a former member of ISMA's Commission on Medical Education, and was a recipient of the Kilmer National Award for his work in cancer research.

Warren Baker, M.D.

Dr. Baker, 82, died Nov. 13 at St. Anthony Hospital in Michigan City.

A 1936 graduate of the Northwestern University School of Medicine, he was a general practitioner in Westville for nine years prior to opening his practice in ophthalmology in Michigan City.

Dr. Baker became a senior member of ISMA in 1968.

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

THE INDIANA STATE DEPARTMENT OF PUBLIC WELFARE has a position available for a physician to work in a pleasant office atmosphere; no patient contact; no malpractice insurance required; an Indiana license or eligibility is required; competitive salary; regular working hours; excellent fringe benefits. Contact: Personnel Director, Indiana State Department of Public Welfare, 702 State Office Building, 100 N. Senate Ave., Indianapolis 46204. Phone: (317) 633-6403.

FOR LEASE: On Vanderbilt Beach near Naples, Fla., two-bedroom, two-bath new condominium on the beach. Docking facilities available. Tel: (317) 644-6147.

FAMILY PRACTITIONER OR INTERNIST full time for 60-bed comprehensive alcoholism treatment center with plans for expansion to 100+ beds and expanded outpatient services. Will work closely with and share coverage with three other full time physicians, and be responsible for initial medical evaluation, detoxification, treatment of medical problems and complications. Opportunity for involvement in teaching of medical students, residents, physicians and other health professionals. SALARY NEGOTIABLE ($50,000+) and excellent fringe benefits, including 4 weeks vacation, paid CME, paid health, disability and liability insurance. QUALIFICATIONS: M.D. with additional training and experience in Family Practice or Internal Medicine, sincere interest in treating alcoholics and Indiana Medical License, Board Certification and previous experience in Alcoholism Treatment preferred. CONTACT: Gerald P. Johnston, M.D., Medical Director, Fairbanks Hospital, Indianapolis, Ind. 46202. Tel: (317) 638-1574.

LOCUM TENENS—EMERGENCY MEDICINE—available in our 100 hospitals; monthly scheduling is flexible and according to your preferences; malpractice is paid, excellent hourly income according to your flexibility and hours worked. Call toll free 1-800-325-3982, ext. 220 for details.

FMG with Indiana license completing psychiatry residency June 1979 looking for a position as full-time staff psychiatrist or as a liaison. Prefer general hospital but would consider CMHC. Contact Arun F. Patel, M.D., 2570 Eastgate #10, Toledo, Ohio 43614.

OPPORTUNITIES FOR PHYSICIANS—There are current openings among the Indiana State Hospitals at various locations throughout the State for psychiatrists and physicians of other specialties, at most experience levels. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, Ky. 42071 or call (collect) (502) 753-9772. Forrest is retained by the Indiana Department of Mental Health.

WANTED: Used exam tables, EKG machine, hyfercator, microscope, copier and other GP office equipment. Call or write HK R5 309 Baseline Rd., Evansville, Ind. 47711. Tel: (812) 867-6774.

ANESTHESIOLOGY resident training program seeks qualified Indiana applicants. Experience in general practice or primary care preferred. Inquire: Lucien E. Morris, M.D., Department of Anesthesia, Medical College of Ohio, Caller Service #10008, Toledo, Ohio 43699.

V.W. CAMPMOBILE—1976, green, like new. 15,000 miles. Popup top, electric refrigerator, propane stove, space heater, radio, etc. Robert W. Currie, M.D., 7106 Bohnke Dr., Fort Wayne, Ind. 46815. Tel: (219) 749-2592.

FAMILY PRACTICE PHYSICIAN(S) WANTED—To take over excellent practice in southern Indiana from physician wishing to retire. Well located, beautiful clinic-type office building large enough for one or more physicians. Ample parking. Will assist in transition for one or two years if desired. W. E. Schoolfield, M.D., Orleans, Ind. 47452. Tel: (812) 865-3350 or 3351.

Indiana Medical Foundation

The Indiana Medical Foundation was organized to furnish support for the educational activities of the Indiana State Medical Association. These activities include programs for continuing education and the scientific publications of **The Journal.** Contributions made to the foundation are deductible by donors in accordance with the Internal Revenue Code. Bequests, legacies and gifts are deductible for federal estate and gift tax purposes. Memorial contributions made to the foundation will be formally recorded and acknowledgment will be sent to the family. Gifts, bequests, and memorial contributions may be mailed to the foundation at 3935 N. Meridian St., Indianapolis 46208.



"Efficiency is the key to your practice"
Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE
6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

Are You Moving?

If so, please send change of address to Membership Dept., ISMA, 3935 N. Meridian St., Indianapolis, IN 46208, at least six weeks before you move.

Name _____

Address _____

City _____ State _____ Zip _____

County _____

IMPORTANT — Attach mailing label from your last Journal here.

ADVERTISERS IN THIS ISSUE

January 1979 Vol. 72 No. 1

American Medical Association 19
Americana Healthcare Center 38
Anacomp 5

Blue Cross-Blue Shield 7
Beltone Electronics Corp. 17
Brown Pharmaceutical Co., Inc. 37
Burroughs Wellcome Co. 50

Commercial Announcements 69

Hanger Protheses 63
Hempel Financial Corp. 3

Immke Circle Leasing, Inc. 64
Indiana Medical Bureau 18

Lilly, Eli and Company, Inc. 13

McClain Car Leasing, Inc. 30
Medical Protective Company 61
Mediclinics 42
Merrell-National, Inc. 9, 32, 33, 34, 48, 49

Physicians' Directory 66
Prevention of Blindness, Inc. 22
Professional Careers Institute 70
P&SLI 41

Rockwood Insurance Company 29
Roche Laboratories Covers, 10

Smith, Kline & French 31

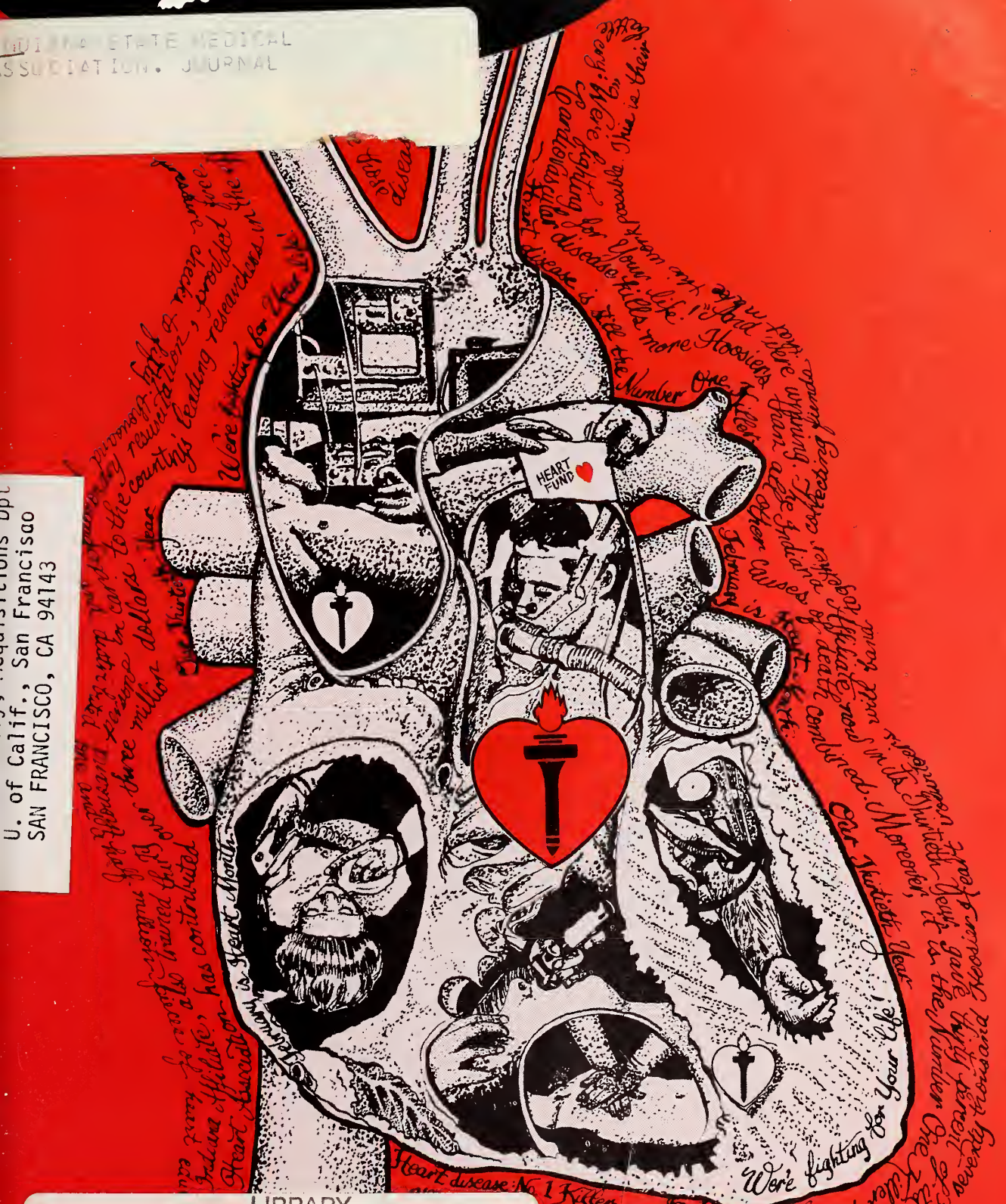
The Upjohn Company 20, 21, 22
The Williams & Wilkins Co. 62

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

February 1979 • Vol. 72 • No. 2

The JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

INDIANA STATE MEDICAL ASSOCIATION. JOURNAL



U. of Calif., San Francisco
SAN FRANCISCO, CA 94143

LIBRARY
U.C. SAN FRANCISCO
FEB 26 1979

PERFORMANCE. PROVEN EFFECTIVENESS WITHIN A WIDE SAFETY MARGIN.



While Roche Laboratories already knows more about the performance of Librium than anyone else, we keep on learning every day.

For example, the highly favorable benefits-to-risk ratio of Librium is a well-documented matter of record.

And, of course, the specific calming action of Librium has been demonstrated in millions of patients around the world. In a large number of these patients, Librium was used concomitantly with other primary medications.

Proven performance within a wide safety margin. Basically, that's what Librium is all about.

LIBRIUM® Ⓡ IV

chlordiazepoxide HCl/Roche

THE ANXIETY-SPECIFIC

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

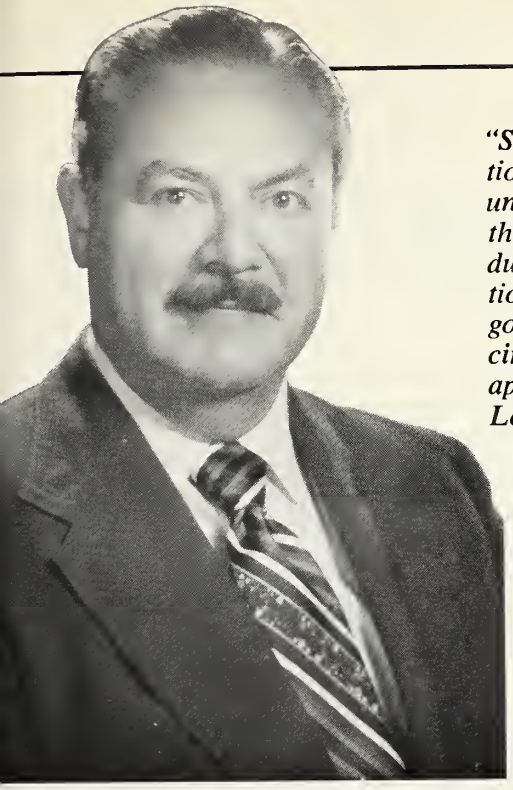
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

ROCHE

Roche Products Inc.
Manati, Puerto Rico 00701



"Suddenly being elevated to the presidency of our Association following Jim Harshman's tragic death is a difficult and unexpected challenge. I seek your support and ideas so that in 1979 we can actively pursue the plans Jim outlined during our fall convention—plans to improve communications, to develop our computer program, and to harness government interference in the private practice of medicine. Jim said that we cannot afford to be silent or apathetic on issues that affect our patients or us. I agree. Let's not allow the shadows of apathy to dim his vision."

Dr. Popplewell Assumes Presidency of ISMA

DR. ARVINE G. POPPLEWELL of Indianapolis has assumed the presidency of the Indiana State Medical Association, succeeding the late Dr. James A. Harshman, who was killed in a traffic accident Dec. 11.

Dr. Popplewell, 56, had been named president-elect of the Association during its annual convention in Clarksville last fall. Previously, he had served as ISMA's treasurer since 1975. He will serve as president of ISMA until October 1980.

Dr. Popplewell received his M.D. degree from the Indiana University School of Medicine in 1946. A specialist in pulmonary diseases, he is a Fellow and former Governor of the American College of Chest Physicians and a member of the Indiana Chapter, American College of Chest Physicians, Indiana Thoracic Society, Mississippi Valley Thoracic Society and the American Thoracic Society.

He has been a professor with the Department of Medicine, I.U. School of Medicine, since 1973. Until 1975, he had spent six years as assistant dean of the I.U. School of Medicine for Marion County General Hospital (now Wishard Memorial Hospital), Indianapolis.

Early in his medical career, Dr. Popplewell served in the U.S. Army Medical Corps and later as superintendent and medical director of Sunnyside Sanatorium, Indianapolis.

From 1955-75, he was medical director of hospitals for The Health and Hospital Corporation of Marion County. Simultaneously, he served as superintendent of Marion County General Hospital. While associated with that hospital, he served as co-director and later chairman of the Pulmonary Disease Service, and as director of Respiratory Therapy.

Dr. Popplewell currently is a member of the board of directors of Central Indiana Health Systems Agency and a member of the Downtown Kiwanis Club, Indianapolis.

In the past, Dr. Popplewell served as president of the American Lung Association of Central Indiana; president of the American Lung Association of Indiana; president of the Marion County Tuberculosis Association; board member of the Marion County Cancer Society; member of the medical advisory committee, Marion County Heart Association; president of the Indianapolis Area Hospital Council; board member, University Heights Hospital; board member of the Home Care Agency of Greater Indianapolis, Inc.; and chairman of the Health Systems Agency Sub Area I Council.

He also served as president of Comprehensive Health Planning of Central Indiana, which he helped organize, and as a board member of Health Service Management, Inc., which he also helped organize.

Dr. Popplewell, born in the capital city, lives in Indianapolis with his wife Karen. He has two children, Vyn Gerald Popplewell and Sharon Lynn Zaepfel, both of whom live in Indianapolis.

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis



This page of Medical Museum Notes features the photograph and matriculation card of J. Adams Allen, M.D., Ll.D., president of Rush Medical College and professor of The Principles and Practice of Medicine.

The card is one of a complete set of matriculation cards for Rush Medical College for the year 1880-81, given to the Museum by Mr. and Mrs. Robert Stillwell of St. Louis, Missouri. The cards were used by Mr. Stillwell's grandfather, Dr. Robert C. Milburn, who practiced at Elwood, Logansport, and Muncie (Museum Notes, December 1978).

Jonathan Adams Allen was born Jan. 16, 1825 in Middlebury, Vermont. He was reared in Vermont, where he attended Middlebury College. Later he attended the Castleton Medical College, also in Vermont, graduating in 1846. He then settled in Kalamazoo, Michigan, where he married Miss Mary Marsh in 1847. Dr. Allen lived in Michigan for 12 years, being elected president of the Michigan State Medical Society in 1858.

J. Adams Allen, M.D. 1825-1890

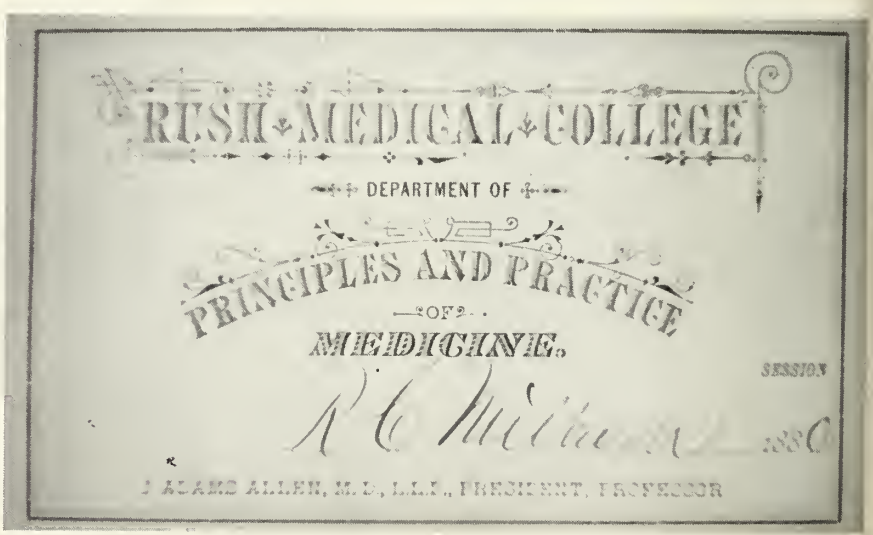
Dr. Allen had a brief association with medical education in Indiana, hence his qualification for this page. While living at Kalamazoo, he was appointed to the faculty of the Indiana Medical College at LaPorte, where he taught the subjects of Materia Medica, Therapeutics, and Medical Jurisprudence. Among others, his students included Richard Gatling (Museum Notes, September 1978), William Lomax (Museum Notes, October 1978), and William Henry Wishard, father of William N. Wishard, M.D., for whom Wishard Hospital at the Indiana University Medical Center is named.

The medical school at LaPorte folded in 1850. Dr. Allen, meanwhile, had been elected professor of Physiology and Pathology in the Medical Department of the University of Michigan.

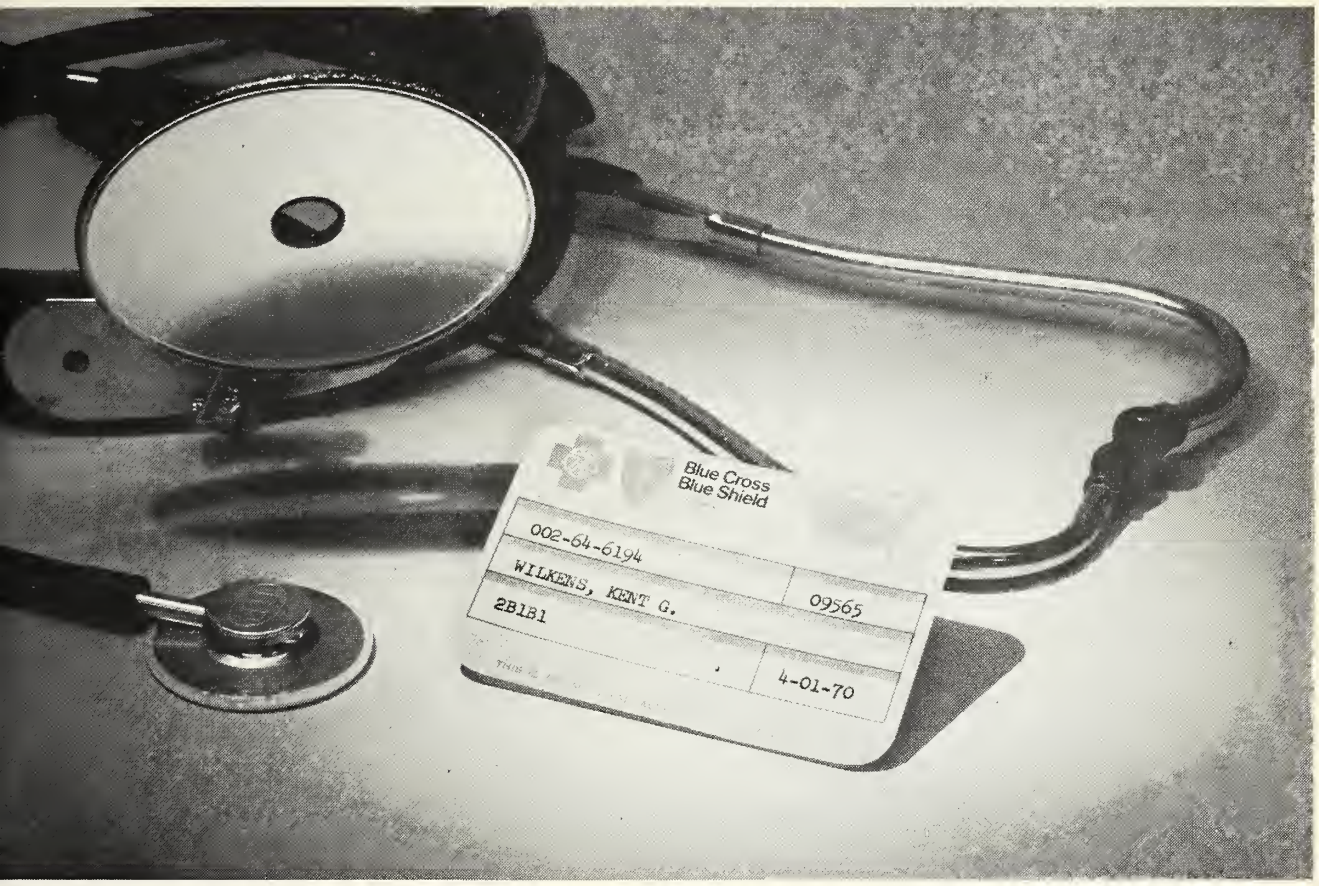
In 1859 Dr. Allen moved to Chicago to practice and to accept the chair of professor of Theory and Practice of Medicine in Rush Medical College, later becoming president of the School. He continued teaching until failing health forced his retirement in 1890. Dr. Allen died Aug. 15, 1890 at the age of 65 years.

Another student of Dr. Allen's (at Rush in 1863) was Dr. Richard French Stone, who was one of the founders of the Central College of Physicians and Surgeons in Indianapolis in 1879. Dr. Stone is best remembered for his book, *Biography of Eminent American Physicians and Surgeons,* (Indianapolis, Carlon and Hollenbeck, publishers, 1894).

Dr. Stone was a brother-in-law of Dr. Robert W. Long, who gave the Long Hospital to the Medical Center in 1914. Dr. Long's copy of Dr. Stone's book was given to the Museum by Dr. Long's niece, Mrs. Clara O. Carter of Lawrenceville, Illinois, this copy providing Dr. Allen's photograph and the biographical material for this page.



Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- **One full year in-hospital care**
- **100% semi-private room and hospital extras**
- **Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy**
- **$250,000 Major Medical Benefits**

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Paul Biltimier, Senior Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4241.

We believe in being better

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark Nat'l Assn. of Blue Shield Plans

Blue Cross Blue Shield
of Indiana

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION (USPS 284-440)

Volume 72—February 1979—Number 2

Contents

SCIENTIFIC ARTICLES

103 Hypoglycemia in the Diabetic—
Charles M. Clark, M.D.
(14th Continuing Medical Education article)
115 Management of Coronary Artery Disease—
William K. Nasser, M.D.
118 The Five Fingers of Cardiology: ECG—
R. Joe Noble, M.D.
121 Congenital Absence of the Right Pericardium—
Harry Siderys, M.D.
124 Soft Tissue Chondrosarcoma of the Hand—
Raymond O. Pierce, Jr., M.D.
126 Hypnotherapy in the Management of Terminally Ill Cancer Patients—*Hanus J. Grosz, M.D.*

EDITORIALS

76 Drugs: Is Cost the Question?
76 Toward Better Health
83 Editorial Notes
84 Lack of Unity—Loss of Clout
86 Mandatory Second Opinions
88 USA: Land of Paradoxes
114 Problem Solving

SPECIAL FEATURES

71 Dr. Popplewell Assumes Presidency of ISMA
88 The 'Helping Smokers Quit' Kit
90 The Last of the Big-Time Spenders
94 A Final Farewell: Dr. James A. Harshman
110 Notes from The Royal College of Surgeons of England
130 ISMA Calendar of Events

DEPARTMENTS, MISCELLANEOUS

72 Medical Museum Notes
86 There's a Word for It
93 Auxiliary Report
96 Letters
98 Cancer Corner
100 What's New?
130 Future File
132 News Notes



ABOUT THE COVER

Joy Henderson of the American Heart Association, Indiana Affiliate, designed our cover to mark Heart Fund Month. The cutaway depicts the major technological advances, instruments and skills used in treating cardiovascular disease. Featured are scenes from Advanced Cardiac Life Support courses being taught by the AHA faculty throughout Indiana. Ms. Henderson is editor of the HOOSIER HEART NEWS.

EDITORIAL AND ADVERTISING INFORMATION

All articles must be typewritten, double-spaced with margins of one inch.

Photographs should be printed on glossy paper. Negatives cannot be used.

Illustrations are desirable. Selection of illustrations submitted at discretion of editor and editorial board members.

Contributors are responsible for all statements made in their articles. The editors and editorial board members may not be in agreement with all views expressed by authors, but it is desired to give all authors as great latitude as possible.

Articles are accepted for publication with the understanding that they are submitted for exclusive publication.

Advertising rates will be furnished on request. Copy must be received by the 1st of the month preceding month of issue.

Representative for national advertising is the State Medical Journal Advertising Bureau, 711 South Blvd., Oak Park, Ill. 60302.

Annual subscription rates: ISMA members, $8, included in annual membership dues; ISMA senior members, $10; Libraries, $12; all others, $14. Additional postage: Canada and PUAS countries, $2; Foreign, $3. Subscriptions are renewable in July and January.

Entered as second class matter January 25, 1933, at the Post-office at Indianapolis, Indiana.

THE JOURNAL of the Indiana State Medical Association (USPS 284-440) is published monthly by the Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Ind. 46208. Second-class postage paid at Indianapolis, Ind., and at additional mailing office. No copyright is claimed.

All issues of 1967 and subsequently may be obtained on microfilm. Address The Journal for details.

Our International Standard Serial Number is ISSN 0019-6770.

Indexed in Index Medicus and Hospital Literature Index.

Six important reasons why physicians are selecting the Reality® Medical Management System.

1. Improved Cash Flow. Timely patient statements which reflect the detailed account status of charges, payments and aged account balances contributes to faster payments and a reduction of bad debts.

2. Totally Automated Insurance Processing. The **Reality** Medical Management System has incorporated the processing of Medicare, Medicade, Blue Cross, Blue Shield and most other third party payors into the automatic billing and insurance claim reporting function, thus, eliminating clerical time, errors and lost charges.

3. Direct Control. No reports, no files, no charge tickets leave your office. Your personnel, who know your method of operations, communicate directly to the computer based system via a video display terminal. Everything is processed according to your schedule and in a manner which fits your Doctor to Patient relationship.

4. Improved Practice Control. From the management reports and practice statistics, your practice can be managed in ways which will more effectively utilize the resources of the practice, thus, generating a better return on your total investment.

5. Better Patient Care. Research by diagnosis can lead to better patient care. The System maintains data by patient, by procedure and by diagnosis, whereby, retrieval and analysis can provide historical treatment histories. Better patient scheduling by the System makes for better patient relations.

6. Communication With The System In English. Unlike other automated systems, the **Reality** Medical Management System is under your direct control (not through a programmer) in a common language used by human beings — known best as **English**. If you can type, you can talk to the System.

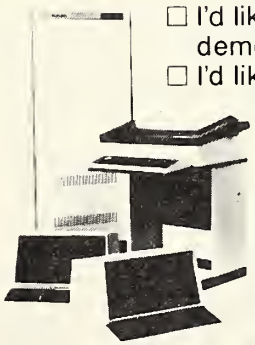
Take A Good Look At Reality. Call Anacomp or send in the coupon today for a free hands-on demonstration. Within 15 minutes you'll know all you need to know about choosing a computer.

Microdata

Attach your business card and send to:

Anacomp
4755 Kingsway Drive
Indianapolis, Indiana 46205

For immediate response, call **317/257-1426**



Show me.

☐ I'd like a free hands-on demonstration of Reality.

☐ I'd like more information.

EDITORIALS

Drugs: Is Cost the Question?

A drug, properly made, will cost the same no matter who makes it.

The most important ingredient in a pharmaceutical product is its quality. Quality in manufacture is achieved by quality control, which is relatively expensive. All drug makers encounter practically the same basic costs for raw material, wages, heat, light, rent and promotional activities. If a drug is to be made to sell at a significantly lower price than its competitor, quality control is the only ingredient that can be omitted in an effort to achieve the lower price and produce a profit.

State laws that either allow or mandate substitution have not lowered the overall drug bill by very much. This is partly due to the customers who, when asked by the pharmacist to agree to substitution, frequently vote for the medicine exactly as the physician has written. It may be that the public reasons that a lower price is associated with lower quality.

Eli Lilly & Co. is among several large research-oriented manufacturers that have instituted public information TV spots to teach consumers the importance of drug quality.

Joann S. Lublin and Rich Jaroslovsky, staff reporters for THE WALL STREET JOURNAL, review the many angles to the problem in a recent WSJ article. They outline the methods the FDA employs to make drug substitution and the use of unidentified generics more popular.

One FDA ploy is to boast of the FDA standards of manufacture, and the very questionable promise of interchangeability between brand name preparations and the generics.

As a matter of fact, FDA has neither the budget nor enough inspectors to adequately monitor the production of all drugs. If you want a quality drug, the way to get it is to go to a manufacturer in whom you have confidence. Usually this is a firm with a large research program and a large set of built-in manufacturing standards—in short, a firm that is proud to put its name on its product.

Apparently the bureaucrats are content to allow and even encourage the dispensing of low quality generics to the disadvantage of high quality drugs. They forget that the profits accruing from high quality products are reinvested in research for newer and better pharmaceuticals.

The FDA chief, Donald Kennedy, is quoted as saying that if reduction of profits from brand name drugs interferes with research, the problem should be solved directly and not by blocking generic drugs. He doesn't say what his direct solution is.

The public should be educated on the importance of drug quality, on the fact that some money and hard work are necessary in the production of quality, and on the fact that newer and better drugs are discovered and produced by the pharmaceutical firms that are research-oriented.

A drug, properly made, will cost the same no matter who makes it. High quality drugs cost a little more but are worth every cent of it. A poor quality drug might turn out to be the most expensive thing on earth.

Toward Better Health

There is little or no relation between medical service and health. Good health is due to a combination of proper heritage, reasonable adherence to the rules of hygiene and good luck. Medical care or the lack of it has very little to do with it.

Columnist Sydney Harris, under the title of "The Cure" in THE EVANSVILLE COURIER on Nov. 17, 1978, illustrates this great truth by referring to the health record of the Navajo Indians during the past 30 years.

CONTINUED ON PAGE 83

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

Editor: Frank B. Ramsey, M.D., 3935 N. Meridian Street, Indianapolis 46208.

Consulting Editors: A. W. Cavins, M.D., R.R. 25, Box 172, Terre Haute 47802; Lall G. Montgomery, M.D., R.R. 1, Box 202, Gaston 47342; Samuel R. Mercer, M.D., 702 Medical Center Bldg., Fort Wayne 46802; I. W. Wilkens, M.D., 4820 E. Pleasant Run Pkwy., N. Dr., Indianapolis 46201; W. D. Snively, Jr., M.D., R.R. 1, Box 227, Evansville 47712; Charles A. Bonsett, M.D., 6133 E. 54th Place, Indianapolis 46226.

Editorial Board:

	Term Expires
Steven C. Beering, M.D., Indianapolis	Dec. 31, 1981
Paul S. Rhoads, M.D., Richmond	Dec. 31, 1981
Elton Heaton, M.D., Madison	Dec. 31, 1979
Rodney A. Mannion, M.D., La Porte	Dec. 31, 1979
Alvin J. Haley, M.D., Fort Wayne	Dec. 31, 1980
Wei-Ping Loh, M.D., Gary	Dec. 31, 1980

Business Manager: Donald F. Foy — 3935 N. Meridian, Indianapolis, Ind. 46208 — **Managing Editor:** Martin T. Badger

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
1128 - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique that we have over $4,000,000.00 in personal loans made to Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Colin G. Hoza
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis **Morris Plan**

Tenuate® Ⓡ
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

Whether overweight is a complicating factor... or just uncomplicated overweight.

Tenuate® Dospan® ℗ IV
(diethylpropion hydrochloride NF)
75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

Merrell

For prescribing information see opposite page.







The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).

© 1978 The Upjohn Company













Motrin 400 mg TABLETS
ibuprofen, Upjohn

The confidence that comes from experience—one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

J-6857-4

The confidence that comes from experience—
one more reason to prescribe

Motrin 400 mg TABLETS
ibuprofen, Upjohn

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

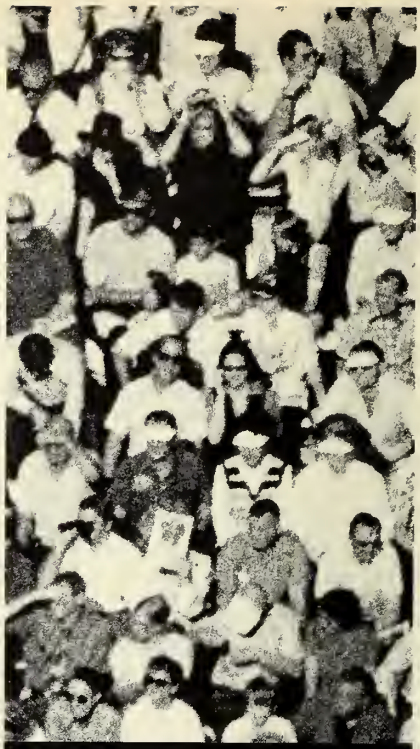
How Supplied

Motrin Tablets, 300 mg (white)	
Bottles of 60	NDC 0009-0733-01
Bottles of 500	NDC 0009-0733-02
Motrin Tablets, 400 mg (orange)	
Bottles of 60	NDC 0009-0750-01
Bottles of 500	NDC 0009-0750-02
Unit-dose package of 100	NDC 0009-0750-06
Unit of Use bottles of 120	NDC 0009-0750-26

Caution: Federal law prohibits dispensing without prescription.

NIM-3

Upjohn The Upjohn Company
Kalamazoo, Michigan 49001



ALDOMET®
(METHYLDOPA|MSD)
TABLETS: 500 mg, 250 mg, and 125 mg

MSD
MERCK SHARP & DOHME

EDITORIALS

Toward Better Health

CONTINUED FROM PAGE 76

Navajo health has improved markedly in recent ears due not to better medical service but to a vastly mproved socio-economic status. In fact, with improv- ng job opportunities and better finances, the Indians ave a lower death rate and have gained in sanitation, ygiene, nutrition and housing. Their mortality rate is ow below the national average.

Mr. Harris points out that, no matter how many octors or medicine or diagnostic machines you fur- ish a locality, no improvement will be achieved unless he standard of living is raised.

He also says, "Society expects medicine to do the ame impossible task it asks education to do—to take he place of a sound home environment."

Indeed this is true. Some of the biggest health problems cannot be solved by medicine. They depend on proper hygiene and proper conduct. Obesity is one of the most serious and most common American diseases. Its cure may be suggested by the physician, but the accomplishment of cure is a matter of proper nutrition, a function of home life.

The use of tobacco, the indiscreet use of alcohol and the consequences of careless driving all are of this nature. Each of these widely observed abnormalities are susceptible to elimination and cure only by proper training in the home.

The health of citizens in the future will depend on economic status and on better education in the field of hygiene and on better acceptance by everyone of the advantage of improved personal habits.

Editorial Notes . . .

The American Academy of Pediatrics has established policy in opposition to television advertising that is irected toward children. The Academy considers the ractice to be an exploitation of children, which is un- air because of a child's lack of capacity to understand nd evaluate the meaning or intent of TV commer- ials. A national program will be conducted to alert mericans to special needs of infants, children and dolescents.

The fact that schizophrenia and arthritis rarely de- elop in the same patient, and the fact that schizo- hrenics are frequently insensitive to pain and that their ymptoms abate during periods of fever may, according o Upjohn scientists, be due to abnormalities in prosta- landins and reactions in the tissues. Prostaglandins ave also been found to have profound effects on the ecretion of insulin.

Aspartame, the low-calorie sweetener developed by earle, has been under secondary research examina- on during the past year or so. The Universities Asso- iated for Research and Education in Pathology UAREP) have just completed a review, which was ommissioned to validate Searle's findings on the sub- tance. Aspartame is about 200 times sweeter than ugar. It is composed of two amino acids that occur aturally in more than half of all foods. The UAREP eport is understood as being favorable.

Upjohn researchers in recombinant DNA technology ave modified a strain of E. coli bacteria to produce hicken ovalbumin, the major component of egg white. This is the largest and most complex protein yet synthesized by bacteria from genes inserted in the laboratory. The ovalbumin is released intact into the broth in which the modified bacteria are growing.

Treatment of venomous snake bites changes constantly. First, whiskey was found to do more harm than good. Now, the AMA First Aid Guide advises that cold applications do more harm than good. Apparently, the necrotizing effect of venom is enhanced by cold.

Paget's Disease (of the bone), once thought to be rare, is now estimated to occur in approximately two million Americans. There are now at least three medications that will relieve various aspects of the disease in some patients. The Paget's Disease Foundation has been formed to improve diagnostic methods and promote research on additional treatment. With the advent of effective therapy, it is possible that more and more early examples of the disorder will be diagnosed and subjected to treatment.

An AMA Editorial

Lack of Unity = Loss of Clout

Our AMA federation must shun the internal damage that has made organized labor much less effective in Washington than the publicity accorded its leaders might suggest.

"Big labor isn't very big anymore," liberal syndicated columnist Nicholas von Hoffman wrote in the December issue of HARPER'S, adding, "the labor lobby has come down with pernicious anemia."

He further said:

"Without a kick in the pants of the kind that unions can no longer deliver, labor must suffer increasing rejection from the national government. The last session of Congress saw organized labor lose almost everything it wanted, in particular the labor-law reform bill . . ." That bill would have eased the unions' organizing efforts.

As the primary reason for the loss of clout, von Hoffman cites the falloff in union membership to only about 20% of the labor force. "Since 1974, unions have lost more than half a million members, while in the same period the economy added 6 million new jobs."

The lack of unity in the union movement could well be an additional reason, we believe. For example, the only three unions with more than a million members (according to the 1978 WORLD ALMANAC)—the Teamsters, United Auto Workers, and National Education Association—are unaffiliated with the AFL-CIO.

In contrast with organized labor, the AMA has been effective in Congress and has improved its relations with the White House. To remain effective, however, our federation must grow in its proportion of the total number of physicians and in unified membership.

In the 1977-78 Congress, our federation was instrumental in the demise of such offensive bills as:

- A bill to extend Federal Trade Commission jurisdiction to non-profit organizations, which would include the AMA, its component societies, and medical-specialty societies. Along with eliminating Congressional sanction of the FTC's current anti-trust action against physician solicitation of patients, the bill's death is likely to help us if the FTC administrative judge's adverse ruling on the issue has to be carried as far as the federal courts.
- A Health Planning Act amendment that would have extended certificate-of-need provisions to purchase of new equipment by physicians' offices.
- Mandatory cost containment, as contrasted with the Voluntary Effort spearheaded by the AMA, the American Hospital Association, and the Federation of American Hospitals, with splendid support from their state bodies.
- The proposed Clinical Laboratory Improvement Act, which would have set national standards for the training of lab technicians and harassed lab procedures in many physicians' offices.
- The drug regulation reform bill, which would have further muddled the development, distribution and use of beneficial drugs.

Let's sustain our impact. And let's all work for the membership growth and unity that are needed to sustain it.

THE INDIANA STATE MEDICAL ASSOCIATION

3935 N. Meridian, Indianapolis 46208—Telephone 925-7545

1979 Annual Meeting—Oct. 13-17—Indianapolis

OFFICERS FOR 1978-79

President—Arvine G. Popplewell, 3530 S. Keystone, Indianapolis 46227

President-Elect—

Treasurer—Joseph F. Ferrara, 111 S. Water St., Franklin 46131

Assistant Treasurer—Douglas H. White, 3524 N. Meridian, Indianapolis 46208

Executive Committee—Paul W. Holtzman, Chairman; Arvine G. Popplewell, Joseph F. Ferrara, Douglas H. White, John W. Beeler, Eli Goodman, Alvin J. Haley, Members

Speaker of the House—Lloyd L. Hill, 302 N. Duke St., Peru 46970

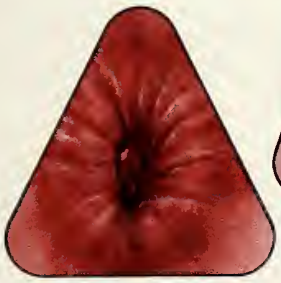
Vice Speaker—Lawrence E. Allen, 2009 Brown St., Anderson

Executive Director—Mr. Donald F. Foy

For hemorrhoids and other anorectal conditions



External hemorrhoids



Internal hemorrhoids



Pruritus ani



Proctitis



Anal fissures



Easy to handle, easy to insert, comfortably shaped—Rx only

Easy to apply, nonstaining—Rx only

Prescribe Anusol-HC®

Suppositories/Cream

for symptomatic relief

- Effectively reduces inflammation and edema
- Rapidly relieves pain and itching

ANUSOL-HC® SUPPOSITORIES
Hemorrhoidal Suppositories
ANUSOL-HC® CREAM
Rectal Cream with Hydrocortisone Acetate
CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg; bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian balsam, 18.0 mg; zinc oxide, 110.0 mg, also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani. Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: Anusol-HC® Suppositories and Anusol-HC® Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24); in silver foil strips with Anusol-HC W/C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01); with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F.)

Full information is available on request.

Warner/Chilcott
Division, Warner-Lambert Company
Morris Plains, N. J. 07950

AN-GP-91

The professional source of anorectal comfort

Guest Editorial

Mandatory Second Opinions: Bah! Humbug!

JOHN B. THOMISON, M.D.
Editor
Journal of the Tennessee Medical Association

A couple of weeks back I received a brief letter from one of our colleagues, with a copy of a letter he had written our President, John Dorian, M.D., as well as a copy of the letter to which he was responding, namely a proposal by the Prudential Insurance Company of America that he become a panelist in Prudential's Elective Surgical Second Opinion Program. His comment to Dr. Dorian was, among other things, "This sort of thing is getting just a little bit old and I would like to see us respond to it. I think the very nature of it automatically assumes the surgeon recommending elective surgery is guilty until proven innocent." Precisely.

This is precisely what they do think, and it is precisely what they would have the public think. Our colleague indicated he was interested in my comment, and this editorial response is essentially what I wrote him.

In the first place, I find the entire concept of a second opinion program offensive, inasmuch as it implies not so much that the judgment of any of us can be wrong, which of course it can, and which we realize that it can, but that it implies unwillingness on the part of surgeons, and indeed physicians generally, to seek consultation. I am certain there are instances which all of us can think of where it would have been worthwhile to seek a second opinion when none was sought, but the vision is always good through a retrospectoscope. The implication is that medicine is an exact science, and if one only practices the science right, he is bound to come up with the correct answer, whereas all of us know this is not so.

The second matter which disturbs me is that this will unnecessarily and vastly increase the cost of medical care. Not only will it increase the monetary cost, but the cost to the patient emotionally will be incalculable. Where two experts disagree, there can be no certainty as to which is right, and the second opinion will then call for a third opinion and perhaps a fourth opinion and so on and on, perhaps not insofar as Prudential is concerned, but for the patient's peace of mind. As a pathologist, I have found that on the difficult cases where I and one of my colleagues disagree, if we send the slides to 10 pathologists we are quite likely to find five on one side and five on the other. This is a situation in which the second opinion program is vastly wanting.

I think all of those who have administrative responsibility for such a program, such as insurers and legislators, should be made aware of these facets of the problem. While I believe it unlikely they will be sympathetic to our problems, perhaps they can understand that there is going to be a tremendous cost to the patient, and because much of the expense is born by tax supported agencies, the expense will be shared by all of us.

Rhythm

There's a Word for It

RICHARD J. NOVEROSKE, M.D.
Evansville

Have you ever wondered where the word *rhythm* comes from? This is an unusual word; we use it frequently for music, poetry, the alternating seasons of the year, and changes in our bodies—to name a few.

I had to dig the origin out of a couple of unabridged dictionaries and put some thought to it. I was so pleased with what I found that I want to share it with you.

The *rhy* stem of this word comes from our old friend *rrh* meaning *to flow*. We find this stem in hem*orrh*age, di*arrh*ea, and cat*arrh*, for example.

The *thym* stem means *spirit*. We think of *cyclothymic* for the up and down swinging of some people's moods. We think of the thymus gland that the Greeks or somebody probably thought of as the seat of the *spirit* or the *soul*. And we know of thyme, the herb that is used to give zest to cooked food.

So the word *rhythm* probably had the idea of *flow of the spirit* fused into it when it was coined. And this seems to be an appropriate word, for we see many things around us where a flow of the spirit can be felt or sensed.

Your Patient Saves Dollars with Generics by PUREPAC

Here's Proof!

These products and prices were taken directly from newspaper advertising by various retail pharmacies.

QUANTITY	BRAND NAME®	PRICE	PUREPAC GENERIC	PRICE	SAVINGS
30	Polycillin (250 mg.)	$8.70	Ampicillin (250 mg.)	$2.40	$6.30
100	Equanil (400 mg.) C IV	8.09	Meprobamate (100 mg.) C IV	1.83	6.26
100	Darvon Comp. 65 C IV	7.83	Propoxyphene HCl Comp. 65 C IV	4.63	3.20
100	Pavabid (150 mg.)	11.73	Papaverine HCl T.R. (100 mg.)	4.33	7.40
100	Thorazine (50 mg.)	6.03	Chlorpromazine HCl (50 mg.)	3.23	2.80
100	Librium (10 mg.) C IV	7.11	Chlordiazepoxide HCl (10 mg.) C IV	4.89	2.22

The savings add up! So, when you prescribe generics, specify Purepac, the largest generic manufacturer in America.

rand names are registered trademarks of
ristol Labs., Wyeth Labs., Eli Lilly & Co.,
larion Labs., Smith Kline & French Labs.,
oche Labs. respectively.

PUREPAC
Elizabeth, NJ 07207
AMERICA'S LEADING NATIONAL BRAND OF GENERICS

Special Communication

The 'Helping Smokers Quit' Kit

ARTHUR C. UPTON, M.D.
Director
National Cancer Institute

Cigarette smoking remains the single greatest preventable cause of death and disability in the United States today. In 1977, smoking was a major factor in an estimated 220,000 deaths from heart disease; 78,000 lung cancer deaths; and 22,000 deaths from other cancers, including cancers of the mouth, esophagus, pancreas, kidney and bladder. Forty per cent of all cancers in males, and a rapidly increasing percentage in females, are caused by smoking. Eighty-five per cent of deaths from bronchitis, emphysema and other lung diseases could be prevented if people stopped smoking.

Fortunately, a recent study has shown that 9 of 10 smokers want to quit. The large majority indicate they would quit if their physicians told them to. And studies confirm that many smokers have quit upon advice from their physicians. However, about two-thirds of smokers report that they have never received advice on quitting from their physicians.

To help physicians encourage quitting by their patients, the National Cancer Institute has developed the "Helping Smokers Quit" kit. The kit contains enough materials to assist 50 smokers who want to quit.

The kit can make a major contribution to your efforts to prevent cancer and other chronic diseases among your patients. The kit is being provided free of charge to all physicians who want to participate in this important preventive health effort.

To order the kit, write Office of Cancer Communications, National Cancer Institute, Bldg. 31, Rm. 4B39, Bethesda, Md. 20014.

Guest Editorial

USA: Land of Paradoxes

L. A. ARATA, M.D.
Shelbyville

Parodoxes seem to be such weird objects to me that I comment on a couple of big ones that exist in our great land.

Our national, state and local governments, at great taxpayer expense, maintain a huge expensive arm called the *Justice* Department or system. It sounds nice, but it seems to be a great misleading name. It is not a system of justice, but is a legal system.

Seldom does justice rear its lovely head in the system. Justice is always delegated to insignificance, as the lawyers and judges quibble over the loopholes and technicalities. Laws mean not what the legislators say they mean, but rather what some nit-picking, black-robed, pompous ass thinks they ought to mean. Small wonder that so many of us have only contempt for the entire hypocritical mess.

I have seen more justice in the TV Western movies of the "Hanging Judge" and the horse thief than I have in any of the deliberations carried out in the marble palaces housing our modern courts.

* * *

Once upon a time in our fair land, thinking people came to the conclusion that teaching children to read, write, and use a few numbers was worthwhile. To achieve this, schools were built and maintained. From a multitude of schools, an educational system was established and most people learned to read, to write, and to juggle a few numbers.

Then came educational reform. The schools became centers for racial integration, for socialization of children, for babysitting, and for feeding the children. By the time these new duties were discharged, there was little time left for teaching.

The results, as we all see, are young adults who cannot read, write or juggle numbers. Now is long past the time to establish some teaching institutions—to take the products of our educational system and to teach them to read, write and comprehend numbers.

* * *

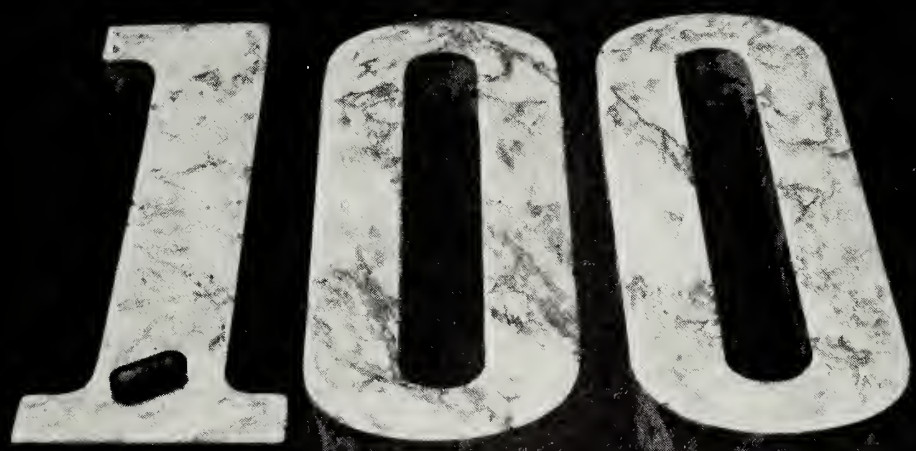
Supporting these paradoxes costs taxpayers untold billions of dollars: a justice system without justice; an educational system without education.

contains no aspirin

tablets

Darvocet-N® 100 Ⓒ IV

100 mg. Darvon-N® (propoxyphene napsylate)
650 mg. acetaminophen



Lilly

Additional information available to the profession on request from Eli Lilly and Company Indianapolis, Indiana 46206

700565

Eli Lilly and Company, Inc.
Carolina, Puerto Rico 00630

Commentary

The Last of the Big-Time Spenders

RICHARD L. LESHER
President
U.S. Chamber of Commerce



"When adjusted for inflation, Medicare beneficiaries spent more out-of-pocket for health care last year than they did in 1964, the year Medicare was passed. The Medicare nightmare is that after all these years and all the billions of dollars spent, the elderly are back at square one with respect to their health security."

That quote is from a letter Senator Kennedy sent to THE WALL STREET JOURNAL. His diagnosis of the problems the government caused by pouring billions of dollars into ill-conceived and poorly administered national health care programs is quite good, except for one omission: He should have noted that reckless federal spending has generated the very inflation that is now the number one problem for the elderly and the rest of us as well.

With such an admirable grasp of the futility of trying to cure social ills by massive infusions of printing-press money, you would think that a larger, more costly federal health care program would be the last thing on the Senator's mind. Unfortunately, a larger, more costly federal health care program appears to be the first—and perhaps the only—thing on the Senator's mind.

The need for a new national health care plan is hardly self-evident. Roughly 90% of us already have health insurance of one kind or another. Any gaps in the current system can be filled at a reasonable cost, which is what President Carter seems to be proposing.

The President's approach is the proper one, because the two factors most responsible for the upward spiral of medical costs would both be aggravated by a universal government-run program.

One of these factors was the sudden outpouring of federal money into the system when Medicare and Medicaid came along. The supply of funds available to spend on health care increased much faster than the supply of hospitals, medical personnel, etc. And money, like water, seeks its own level. That problem is admittedly temporary, unless we repeat the initial mistake.

The other problem is one which our own continuing studies of the health care industry unfailingly turn up: There is not enough individual incentive to control costs. Insurance now pays 90% of the hospital bills and 66% of the doctors' bills.

Under those circumstances, medical personnel don't have much cause to worry about what they're charging the patient, because they know the patient has insurance. The patient doesn't have sufficient incentive to be cost-conscious either, for the same reason. And the insurance companies can simply pass their costs along to the insured (which often means the insured's employer).

One proposed solution to lax cost-control is the Health Maintenance Organization (HMO), which makes more money when its patients stay well than it does when they get sick. Thus, the emphasis is on preventive care for the well and effective treatment at the lowest possible cost for the ill.

Another solution is peer review, in which panels of physicians rule on the cost-effectiveness of the treatment selected by other physicians.

Still another helpful idea is to find a way to protect physicians from frivolous or malicious malpractice suits, so they will not need to order more tests than are medically necessary.

All of these ideas—and many more—can be used in concert to control costs without undermining the quality of care. The National Chamber will soon begin a community-oriented program to acquaint citizens and businesses with the most effective of the cost-control and health-improvement techniques, based on a study done under the auspices of the National Chamber Foundation. The research was conducted by Inter-Study, an independent health policy analysis and research firm.

We *can* have good health care at an affordable price, if we are guided by reason rather than politics.

But the era of massive, expensive, inefficient federal "solutions" to social problems is over, as most people clearly realize. In time, I suppose, the word will reach even Senator Kennedy.

he Great Laxative Escape



COLACE®

dioctyl sodium sulfosuccinate

Colace means escape—from laxative stimulation, from laxative harshness, from laxative habit. Colace gently helps soften stools for easy, painless, unstrained elimination. It's the great laxative escape, from infancy to old age. Available in 100 and 50 mg. capsules. Syrup or liquid.

Mead Johnson
PHARMACEUTICAL DIVISION

©1976 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. J578

This asthmatic isn't worried about his next breath...



he's active
he's effectively maintained on

QUIBRON

Each capsule or tablespoonful (15 ml) liquid contains theophylline (anhydrous) 150 mg and glyceryl guaiacolate (guaifenesin) 90 mg

- theophylline for effective around-the-clock bronchodilator therapy
- 100% free theophylline

Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100; Liquid in bottles of 1 pint and 1 gallon.

See package insert for complete prescribing information.

Mead Johnson
PHARMACEUTICAL DIVISION

© 1979 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. MJL 6-4220



AUXILIARY REPORT

Ruth (Mrs. G. Beach) Gattman
President, ISMA Auxiliary

On behalf of the Auxiliary, I would like to extend our deepest sympathy to Mrs. Eva Harshman and family on the sudden, untimely death of her husband Jim. Dr. James A. Harshman, president of the Indiana State Medical Association, was both a friend and a loyal supporter of the Auxiliary. He was convinced that the Auxiliary was a real asset to the ISMA and, as such, he encouraged Auxiliary participation in ISMA commissions and committees. He was never too busy to discuss problems or concerns, especially if they were related to medicine or the Auxiliary.

Dr. Harshman will be missed especially for his clear thinking and good humor. We are grateful for the opportunity we had to work side by side with a man of such great stature. He will be missed by all who knew him.

Tuesday, Feb. 13 will be our annual Meet Your Legislator luncheon at the Hyatt Regency Hotel, Indianapolis. This promises to be a very stimulating day. It's an excellent opportunity to learn more about how the legislative process works on the state level, and how we can play an effective part in this process. The day will include a workshop for all participants and will be highlighted by visiting our state legislators. We anticipate a record attendance as there is great interest among Auxiliary members in legislation. We hope to see each county represented.

As the new year begins, I would be remiss if I did not express my thanks to the ISMA, its leadership and staff for being so helpful and responsive to the needs of the Auxiliary. To Dr. Arvine Popplewell we extend our best wishes as you assume the presidency of the ISMA. We look forward to working with you and hope that your close association with the Auxiliary during these next 22 months will be a happy, rewarding experience.



McClain Car Leasing, Inc.

1745 Brown St., Anderson, Ind.

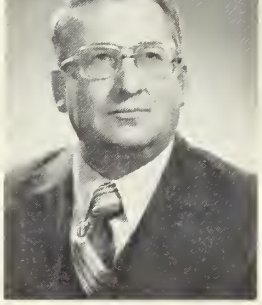
Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA

A Final Farewell . . .



Dr. James A. Harshman

Rev. John Staton of the First Congregational Christian Church, Kokomo, delivered the following eulogy about Dr. James A. Harshman, president of the Indiana State Medical Association at the time he was killed in an automobile accident Dec. 11.

The text of eulogy, delivered during a memorial service conducted Dec. 15 at St. Joseph Memorial Hospital, was sent to ISMA by Sister M. Martin, administrator of the Kokomo hospital, where Dr. Harshman had served as pathologist since 1962.

ABE LINCOLN once said that he "liked a man who liked his place, and whose place liked him." Your presence here at this memorial service is ample evidence that a man named James Harshman indeed loved his place so much that his place, in turn, loved him!

In these few moments, in which we are keenly aware that life is always bigger than we are to embrace it; and painfully aware of our own mortality and the untimeliness of death; we come together lovingly to remember Jim, and to celebrate the meaning of his life.

One of the chief clues to the meaning of Jim Harshman is the total humanness and everyday "old shoe" likeability that marked his years. I was touched when Sister Martin told me that the other morning the first person with whom she shared tears was one of you who works in the cafeteria—one of you who knew Harsh not as a close professional colleague, but as a super guy who always took time to say a warm "Good Morning," or whatever else was on his mind! When a whole hospital is going around using up tissues by the zillions, over the loss of one of its team, then you know how unusually special and unique that person had to be in relating to others and caring about them!

To those closest to him in the Pathology Department he was, indeed, like a brother. As somebody said, "If Max was the proton, the Harsh was the neutron"—or is it the electron There was a hand-in-glove fit of one colleagu to another. One can never quite replace tha kind of comfortable, efficient, reciprocal re lationship. You can only give thanks for th past joys of it, and know that God's blessin was in it, and will continue in the memory of i

To his physician peer group James Harsh man was a warm friend, a respected gadfly, brilliant pathologist, and a tiger—the guy th made things happen! He was an ardent phys cian pursuing his practice with fascinatio precision, feeling and total competence.

As every court needs a jester to remai human, Jim was ours—a delightful, uni hibited, spontaneous, buoyant, outspoken ma whose honesty was evident, and whose gri was contagious. As Dow Richardson put it i the Tribune editorial, this pathologist for bo of Kokomo's hospitals had a "bustling e thusiastic nature that made him highly popu lar."

Though an "in house" doctor without his li of personal patients, he was so esteemed by h fellows that they named him president of th medical staff in 1974. Never timorous—an notorious for quaint and earthy expressions– he was gifted with a sense of humor so d lightfully authentic and exhuberant that h rarely offended anybody, even when he had bear down a little on somebody.

To the administrative head of this hospit Harsh was just a super pal who affectionate dubbed her—with all the proper dignity of h investiture and office—"Super Nun." No a fectation or officiousness could keep this ma from being himself.

On the Pastoral Care Advisory Boar where I knew him, he responded to all th clergy present by tempering his language a b but often spoke to us about his heart's co cerns for freedom, the right to privacy, th danger of big government, and what it takes keep a good hospital good. You could alwa sense in him the sharpness of mind that d gested a six-week course of nuclear medicine two weeks!

He was an ardent "carer" about the who healing team picture, and was therefore wil ing to serve on the pastoral care board, an address pastors on the subject of patholog even though he took no role in any loc church. I want you to see that he really play a very important role in the church by keepi us religious people from getting too sombe But always behind his good-natured joki was a serious concern for society, and for i dividuals. Just a few weeks ago he took gre

... Warm Friend, a Respected Gadfly, Brilliant Pathologist, and a Tiger— The Guy Who Made Things Happen!"

...s to return my phone call immediately and ... me locate some information.

...he loss of Jim, however, is greater than our loss, or his family's loss; it is a loss to ...community and the whole state. I thought it ...e significant that, immediately after the ac...nt, Bob Boughman called Governor Bowen ...et him know. Jim's participation in the ...ublican Party; the Chamber of Commerce; ...search for a solution to malpractice in...nce; in a local lending institution; in ...nship, city and county councils; and in the ...nty, state, and national medical societies is ...le evidence of what his passing will mean ...o many. His recent election to the highest ...e of the medical profession in Indiana says ... it isn't only in Kokomo that he will be ...ly missed.

...hose of you who knew Jim personally, ...ond the professional and public sectors, ...w that he was just as ardent a family man. ... huge dining and family rooms of his ranch ...e, with tennis courts outside, tell some...g of the story of his attachment to Eva and ...five children they have reared, with whom ...ound his abiding joy. He was never big on ...ntry club life, but—and I'm not sure this ... exactly the way he expressed it—was a ...ck of a gardener!" He loved his alma ...er, Purdue, and Purdue athletics, and to ...e his kids over for a game was special.

...low can we face and accept the loss of such ...ne man! I told Sister Martin the other day ... maybe Harsh is counseling us right now to ...to do it with something of a smile, and the ...it of Robert Frost, when he wrote, "God, ...stop playing my little jokes on you if you'll ...p playing your great big ones on me!"

... do not pretend to know how we live our ... into this grief and wear it out. Surely we ...this hospital—of all places—know that ...th is ever in the midst of life; and as a ...ristian community we believe God's surprise ...ife is ever in the midst of death!

...Ve have the same choice we always have ...en tragedy strikes—to be angry and bitter ...he management of the universe, or to rec...ize that God did not choose to exempt ...n His own Son from the tidal waves of life; ... instead enfolded the disciples with com...ting arms and said: "Go forth to live in his spirit; make his life count all the more by living to the full yourselves!"

There is nothing that our faulty and inadequate words have recalled about James Harshman that God didn't already understand and treasure with us. As Jim's Maker, Redeemer, and Friend, God has always known and cared more even than we have.

God knows and cares when a sparrow falls, or even a hair from our heads! To me that means that Jim never did a single lab test or frozen section in vain, because God made each one count!

He never visited a single patient before surgery—and he visited many—but what God used the visit!

He never spent an hour with his wife, or a game with his kids on the court, but what it counted!

There has not been a single moment of his foreshortened life, nor a single discovery under the microscope, nor a compassionate and caring act, but that God confirmed him in, and made use of it! It has all been put together into a complete life!

I'm trying to say, with Isaac Watts, that God doesn't measure like we do: *"A thousand ages in thy sight are like an evening gone, Short as the watch that ends the night before the rising sun."*

The temporal length of life is as nothing to the sincerity, the quality, the compassion, the leadership, the zest. Jim Harshman's 48 packed years are the equivalent of double that number for other lives! And that's why we grieve so much, because we've lost so much.

Will you let Henry Van Dyke pronounce the benediction over these thoughts?

"Four things a man must learn to do
If he would make his record true:
To think without confusion clearly;
To love his fellow men sincerely;
To act from honest motives purely;
To trust in God and Heaven securely.

but

Who seeks for heaven alone to save his soul,
May keep the path, but will not reach the goal;
While he who walks in love may wander far,
But God will bring him where the Blessed are."

LETTERS

Calls for More Light . . .

I recently secured information on fluorescent lamps . . .

The fluorescent tube is coated on the outside with a silicone that is baked on the glass in a furnace and, therefore, relatively fixed. The inside of the tube is coated with a phosphor, which is usually a powdered form of calcium fluorophosphate. The fluoride ion may at times be replaced with a chloride ion. The molecular structure is not greatly different from bone.

Inserted into the molecular structure are trace amounts of antimony, manganese and/or cadmium, depending upon the color of light desired. In certain bulbs there is also a coating of tin oxide. All bulbs will have approximately 50 mg of elemental mercury depending upon the size.

The lamp produces light by heating the mercury to a vapor. As current flows across the vapor, an emission is produced that causes the phosphor to emit visible light.

I have been unable to find any material as to the reaction of tissue from the materials in a bulb as, for instance, when a bulb breaks and the skin is cut; nor have I been able to find any reaction of the lungs to the dust that is inhaled when a bulb is broken. . . .

DANIEL A. GARD, M.D.
Harcourt Clinic, Inc.
Indianapolis

Seeks Melanoma Patients

I wish to thank members of the Indiana State Medical Association for their past help in referring patients with malignant melanoma to the National Cancer Institute. We are interested in receiving additional referrals for programs designed to evaluate the treatment of this disease using surgery, immunotherapy or chemotherapy in controlled randomized trials.

Patients desired for these trials fall into several categories:

- Previously *untreated* patients with primary lesions suspected of being melanoma;
- Biopsy proven melanoma, prior to definitive surgery;
- Proven melanoma after definitive local surgery where the lesion was invasive to Clark level IV, or V, or where there was a local recurrence;
- Melanoma before and after definitive surgery where disease has spread to regional lymph nodes; and
- Patients with multiple cutaneous metastases without prior nitrosourea treatment.

There are some causes for exculsion, so please contact us to discuss patients who might be eligible. Every effort will be made to keep you fully informed as to the result of treatment and to promptly return the patient to your care for follow-up in collaboration with the National Cancer Institute.

To refer a patient or to obtain further information, please call collect or write: Harriet L. G. Gordon, M.D., Immunology Branch, National Cancer Institute, Bldg. 10, Rm. 4B-18, Bethesda, Md. 20014. Tel: (301) 496-1791.

WILLIAM D. TERRY, M.D.
National Institutes of Health
Bethesda, Md.

A Grandfather Says Thanks

I have started this letter five times and have not yet found a way in which to properly express my most heartfelt thanks for the marvelous treatment my little grandson, Danny, received at Riley Hospital for Children (Indianapolis).

I have always felt that medical care in Indiana was something above and beyond that found anywhere else . . . Those of my family who accompanied Danny to the hospital have told me of the kindness, consideration and total professionalism displayed by the pediatric staff.

The trauma brought on by the possibility that Danny's cardiac problem might be severe, combined with the necessity of his hospitalization for further diagnosis, weighed heavily on all of us for the last several months. At Riley, the staff explained carefully to my family—and even to four-year-old Danny—what procedures would be undertaken; this brightened their spirits and removed their feelings of uncertainty. I am sure the least affected was the little guy, who thoroughly enjoyed the attention lavished on him by the staff.

We were very fortunate; the prognosis in Danny's case is good. The tests showed far less cardiac impairment than anticipated. As you can imagine, this is a big load off all of our minds. Thanks to all you folks down there . . .

From what my wife and kids tell me, there are a lot of little ones in the hospital who are in far worse shape than Danny. I don't know how their care is paid for, but I am sure there must be a benefit or something similar organized for the hospital. I would like to contribute my small talents to such an enterprise . . . I could receive no greater honor than to be permitted to help those who are doing so much for others.

Thank you again for everything. . . .

DANIEL S. GIROUX
Argonne National Laboratory
Argonne, Illinois

Letters will be published as space permits and at the discretion of the editor. They will be subject to editing. Reader response is encouraged. Letters should be addressed c/o THE JOURNAL of the Indiana State Medical Association 3935 N. Meridian St., Indianapolis 46208.



ROCKWOOD
INSURANCE COMPANY OF INDIANA

Professional Liability Insurance Specialists

Physicians, Surgeons, Dentists

Hospital Professional Liability

Represented by:

Health Care Provider Insurance Agency, Incorporated

INDIANAPOLIS . . . Hadley-Mahoney Co., 3640 N. Washington Blvd. 46205
(317) 924-5331

MICHIGAN CITY . . Lindenmeyer Insurance Associates, Inc.
801 East Eleventh Street 46360
P.O. Drawer C
(219) 879-7301

SEYMOUR Wienco, Inc., Room 20, Vehslage Building
P.O. Box 518 47274
(812) 522-2931

SOUTH BEND Hepler-Smith Insurance, Inc.
511 West Colfax Avenue
P.O. Box 1875 46634
(219) 232-4889 (Toll Free 1-800-552-2910)

WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

CANCER CORNER

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

Cancer Trends

GENERAL DATA

The overall incidence of cancer has decreased slightly in the past 25 years. Incidence decreased substantially for cancers of the stomach, uterus, rectum and esophagus. In general, cancer between the ages of 20 and 40 is three times as common in women as in men, but between 60 and 80, men account for more cancer cases.

For men, there has been a much higher incidence of lung cancer, amounting to an increase of over 125% in 25 years; slight increases occurred for cancers of the colon, prostate, pancreas and bladder. Stomach cancer decreased.

For women, decrease in incidence has been noted for cancers of the uterine cervix, bladder and stomach. Incidence of colon cancers remains unchanged, but lung cancer has steadily increased.

Overall since 1949, more men than women have been dying of cancer each year; in 1979, the ratio is expected to be about 55 to 45. But cancer is the leading cause of death among women ages 30-54.

For men, the cancer death rate per 100,000 population has increased by more than 60% since 1950 for blacks, and by 20% for whites. The increased death rate is mainly the result of lung cancer, which rose from 18 deaths per 100,000 in 1950 to 54 deaths per 100,000 in 1976.

For women, since 1950 the death rate has declined by 8% for blacks and 10% for whites. This is due mainly to a sharp reduction in deaths caused by cancer of the uterine cervix, attributed to increased use of Pap tests and regular checkups. There was also a decline in stomach cancer. However, the lung cancer rate has more than tripled from 4 per 100,000 in 1950 to 14 in 1976.

For children, cancer is responsible for more deaths in the 3- to 14-year-old group than any other disease. In 1979, cancer will account for the deaths of about 2,500 children, about half of them from acute lymphocytic leukemia, a cancer of blood-forming tissues.

Overall five-year survival rates have increased for some cancers, and leveled off for most cancers in the past 25 years.

INDIVIDUAL SITES

Breast: Leading site of cancer incidence and death among women. Leading cause of all deaths among women 40-44 years old. No great differences in mortality rate in past 50 years; five-year survival rate, all stages, increased from 53% for cases diagnosed in the 1940s to 65% for cases diagnosed in the 1970s. The percentage diagnosed in localized stage has gradually increased from 38% to 47% during this period. Five-year survival rate for localized breast cancers was 85% for cases diagnosed in the 1970s as compared to 78% for cases diagnosed in the 1940s. Survival rate when regional lymph nodes are involved improved sharply in the 1950s and slowly continued to improve. Since 1950, besides surgery, therapy has included some radiation, chemotherapy and/or hormones.

Colon-Rectum: Equals lung cancer for greatest number of new cases estimated for 1979 (excluding common skin cancers). Only slight changes in recent years in incidence or death rates.

Larynx: Strikes few women; survival rate for men has continued to improve through the 1970s.

Leukemia: Marked change in survival rate of chronic forms from 14% five-year survival for men in cases diagnosed in the 1940s to 30% in 1970s; for women an increase from 17% to 34% during the same period. Acute leukemia continues to show dramatic improvement at some treatment centers, though nationwide statistics for adults and children show a five-year survival rate of only 3%.

Lung: Number one site of cancer deaths among men. Death rate for men has increased more than 25 times in 45 years.Death rate is going up steadily for women. Incidence has more than doubled in both men and women, black and white. Equals colon-rectum cancer for greatest number of new cases estimated for 1979 (excluding common skin cancers.) Five-year survival rate for all stages is low: 8% for men, 12% for women, very slight increase since 1940s.

Pancreas: Highly fatal; five-year survival rate is still only 1%. Incidence increasing, more than 20% for men and women, no known reason.

Prostate: Has increased in incidence by more than 20% in past 25 years. Five-year survival rate has continued to show steady improvement from 1940s to the present.

Stomach: Steady decrease in incidence, more than 50% in 25 years, both men and women; about one-third the death rate of 30 years ago. No known reason.

Uterine: Steady decrease in deaths from this cancer, now less than one-third the rate of 40 years ago. Survival rate shows continued improvement for endometrial form of uterine cancer from 1940s to the present while survival rate for cervical cancer increased from 1940s to 1950s and has since leveled off. Better education programs, better hygiene and wide use of Pap test contributed to the improved survival rates.

Other sites--**Hodgkin's disease:** improved five-year survival rates for both men and women from 25% in 1940s to 54% in 1970s. **Bladder:** slight decline in death rate for women in 25 years, with more than 25% decline in incidence; an increase of over 20% for incidence in men. Five-year survival rates show improvement for men from 41% to 62% and from 44% to 62% for women. **Ovary:** death rates increased slightly in last 25 years. Five-year survival rate shows slight gain from 25% in 1940s to 34% in 1970s. **Kidney, Brain, Thyroid:** survival rates have continued to increase from 1940s to 1970s. **Oral:** showed improvement in survival rates from 1940s to 1950s but rates have leveled since.

TRENDS IN DIAGNOSIS AND TREATMENT

Cancer management today is becoming increasingly individualized, both with respect to diagnostic procedures and treatment. Early detection is followed by a precise staging of the disease, and the use of more than one kind of therapy, often in combination.

Some tumors, formerly with very poor prognoses, now are being cured in many cases. These include acute lymphocytic leukemia and osteogenic (bone) sarcoma in children, Burkitt's lymphoma, choriocarcinoma, embryonal rhabdomyosarcoma, Ewing's sarcoma, histiocytic lymphoma, Hodgkin's disease, retinoblastoma, testicular carcinoma and Wilms' tumor. Other cancers are being more effectively controlled than in the past, and may soon join the cure list.

An outstanding example of successful chemotherapy is the treatment for Hodgkin's disease (a cancer of lymph glands in young adults). The therapy involves a combination of four drugs. In less than 10 years, the five-year survival rate for patients with this cancer rose from 68 to 90% for early cases and from 10 to 70% for advanced cases.

The following developments indicate he directions of current and future research in cancer diagnosis and treatment:

• Common denominator approaches o cancer prevention may be through the udy and manipulation of "oncogenes"—ancer-causing genes which normally are ormant but which may be activated by adiation, chemicals and viruses. Researchers have learned how to manipulate ncogenes in some animals and are determining whether the same thing can be one in humans.

• A simple, inexpensive blood test ased on unique chemical substances rom cancer cells may be able to indicate whether an individual has cancer, nd where that cancer is.

• Synthetic vitamin substances known s retinoids are able to reverse cancer in nimals (chemoprevention) and are now eing tried in people.

• A new technique makes high and otentially lethal doses of the cancer drug, methotrexate, safe and effective for the treatment of some cancers.

• Certain drugs and hyperthermia (the super-heating of body tissues) are being used to increase the effectiveness of radiotherapy.

• Some patients with bone cancer now are treated successfully by removing and replacing a section of bone rather than by amputating the leg or arm. Drugs and radiotherapy also are being used effectively following surgery, resulting in dramatic improvement in survival.

• High-frequency sound waves (ultrasound) instead of x-rays are being used to locate tumors deep in the body. For patients undergoing radiation therapy, ultrasound may enable the therapist to pinpoint the tumor more precisely in order to provide proper radiation dosage and location of treatment.

• Immunotherapy holds hope of harnessing the body's own disease-fighting systems to combat cancer with essentially no overt toxicity. In laboratory animals, substances such as BCG can stimulate immune mechanisms. These substances now are being used in humans alone or with other forms of treatment.

• Because genetic and environmental factors have been found for virtually every major cancer, it is becoming possible to "profile" individuals according to their cancer risk factors, and therefore select the most appropriate diagnostic tests.

• The transfusion of blood components is becoming increasingly available for cancer therapy. Platelets are used to prevent hemorrhaging and white cells to treat infection.

• Computerized tomography uses x-rays to examine the brain and other parts of the body. Cross-section pictures are constructed which show a tumor's shape and location more accurately than is possible with conventional x-ray techniques.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

Since 1899

THE

MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
1810 Broad Ripple Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indianapolis 46220

Northern Indiana Office: Douglas O. Sellan, Representative
120 LaSalle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332

WHAT'S NEW?

Squibb is introducing a two-piece appliance system for the care of ostomies. Called Sur-Fit,™ the appliance combines a protective Stomahesive® wafer with a new snap-lock flange which connects with a disposable drainable pouch. The device may be used to control the stoma of any part of the intestinal tract or urinary tract.

* * *

The 3M Company announces a new use for Albumin Microspheres in a diagnostic technique which can detect thrombi in the deep leg veins and emboli in the lungs. Radionuclide ThromboEmboloGraphy (TEG) with 3M's Technetium Tc99m Albumin Microspheres are injected into dorsal veins of each foot. The Microspheres path is recorded and depicts the rate of flow and collateral circulation. Lung scan will define emboli.

* * *

The Gulf+Western Applied Science Laboratories announce an advanced electronic instrument for more reliable and efficient blood pressure measurements without the use of a stethoscope. The S/D-600™ Series Digital Sphygmomanometer reported by a digital display but has an audio system that permits monitoring of Korotkoff sounds periodically.

* * *

Merck Sharp & Dohme will market a new antibiotic, an injectable named "Mefoxin." The generic name is cefoxitin sodium. It is particularly valuable for beginning therapy with mixed infections, for hard-to-treat anaerobic bacteria such as *Bacteroides fragilis,* and for many bacteria that have developed resistance to other antibiotics.

* * *

Burroughs Corporation offers a WRITE-IT-ONCE® accounting system for doctors which, with one writing, creates a charge ticket, updates the patient's statement and ledger card, posts the daily record of charges and receipts, and prepares a bank deposit ticket. The Speed-A-Claim receipt form serves as both a receipt and an insurance claim form. The statement form positions the address for use in window envelopes.

In Books . . .

Doubleday has released "Autobiography of Dying." The author is Archie Hanlan, victim of amyotropic lateral sclerosis. During the few years prior to his death, he wrote extensively concerning his emotions and observations of the dying process. The diary-like writings were compiled by his friend, Muriel Nelson. Critical reviews have credited the work with being instructive, non-morbid, and intellectually satisfying. 216 pages—$8.95.

* * *



Anchor Press has released "Awakening Intuition" by Frances E. Vaughan, a practicing psychologist in Marin County, California. She demonstrates that intuition is not necessarily a talent which one either does or does not have, but is instead a way of thinking which, like rational processes, can be refined and developed. She gives practical advice and outlines exercises for improvement. 240 pages—$3.50.

* * *

Lippincott is releasing "Laugh After Laugh" by Raymond A. Moody, Jr., M.D., a book on the relationship between humor and health. Dr. Moody is author of the bestselling "Life After Life." In this recent release he cites modern examples of how laughter and humor have actually helped heal. Price—$7.95.

* * *

Syracuse University Press has released "Medical Malpractice Insurance: A Legislator's View" by Tarky Lombardi, Jr. Senator Lombardi, chief legislative author of New York State's Medical Malpractice Law describes how the problem developed and how legislators have attempted to deal with it. 216 pages—$11.95.

* * *

William Wardell, M.D., Ph.D., is the author of a book, "Controlling the Use of Therapeutic Drugs: An International Comparison." The book examines the medical, political, economic and regulatory background to the many utilization control systems for drugs. It may be obtained for $4.75 from the American Enterprise Institute for Public Policy Research, 1150 17th St., N.W., Washington, D.C. 20036.

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

n pharyngitis and tonsillitis

...prompt temporary relief of pain even before patients leave your office.

CĒPASTAT®
mouthwash/gargle/sore throat lozenges

Merrell

Anesthetic eness

he throat with CĒPASTAT hing relief within minutes. nts will appreciate this relief ng for therapeutic measures d. The well-established effects of CĒPASTAT pro- ng temporary anesthesia to d or inflamed oropharyngeal

TAT in your nt room . . .

spray, CĒPASTAT is more liver the most relief to the a of the throat.

Suit the product to the patient . . .

The liquid is best for use at home as a spray or gargle. Lozenges are ideal for patients on the go.

A recommendation is best . . .

It costs less. Keeps the emphasis where you want it . . . on more important counter-measures — your prescription for anti-infectives, for example.

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215



relief of minor sore throat when patients want it . . .

stat

When the indications surface...



NEOSPORIN® Ointment

(Polymyxin B-Bacitracin-Neomycin)

Burroughs Wellcome Co
Research Triangle Park
North Carolina 27709

Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically,* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically,* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chron dermatoses, it should be born mind that the skin is more liable to becc sensitized to many substances, including neomyc The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as fa to heal. During long-term use of neomycin-contai products, periodic examination for such signs is advisable and the patient should be told to discont the product if they are observed. These symptom regress quickly on withdrawing the medication. Neomycin-containing applications should be avoi for that patient thereafter.

PRECAUTIONS: As with other antibacterial prep tions, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occu

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reporte (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

THE JOURNAL, in cooperation with e Division of Postgraduate and ntinuing Medical Education of the diana University School of Medie, offers its readers a Continuing edical Education program. This is e 14th in a series of CME articles, oduced by the faculty of the hool of Medicine and is supported a grant from its Division of stgraduate and Continuing Medl Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 139.



Hypoglycemia in the Diabetic

The following are answers to the pre-test associated with this article, which appeared on Page 57 of the January 1979 issue of THE JOURNAL. The purpose of the pre-test was to aid CME evaluators in determining the effectiveness of CME articles in improving the knowledge of physicians reading them. Category 1 credit for successful completion of a CME pre-test is not granted.

1. True	6. True	11. False
2. False	7. True	12. False
3. True	8. True	13. False
4. False	9. True	14. False
5. False	10. False	15. False

CHARLES M. CLARK, M.D.
Indianapolis

The author is a professor of Medicine and Pharmacology and Director of the Diabetes Research and Training Center, Indiana University School of Medicine. He also is Chief, Diabetes Service, Veterans Administration Hospital, Indianapolis.

This article was prepared as part of the translation mission of the Diabetes Research and Training Center (PHS P60 AM 20542), Indiana University School of Medicine.

THIS ARTICLE WILL BE limited to hypoglycemia that occurs in the diabetic and pre-diabetic patient. We will not discuss spontaneous hypoglycemia in the non-diabetic or the variety of hypoglycemic syndromes associated with endocrine abnormalities, islet cell, and other tumors which occur in the non-diabetic. Several excellent references on these subjects can be found at the end of this article. Hypoglycemia may be classified in a variety of ways; for the purpose of this discussion I would like to classify hypoglycemia in diabetes into four groups:

- Hypoglycemia in the diabetic and pre-diabetic patient not associated with drug therapy.
- Hypoglycemia in the diabetic associated with oral hypoglycemic agents.
- Hypoglycemia in the diabetic associated with insulin therapy.
- Factitious hypoglycemia in the diabetic.

HYPOGLYCEMIA NOT ASSOCIATED WITH DRUGS

Reactive hypoglycemia may be a prelude to diabetes, but this is uncommon in our experience. The majority of these patients do not develop diabetes and live a normal life span. Patients with reactive hypoglycemia who are more likely to subsequently develop diabetes have a positive family history for diabetes, are obese, and have a glucose tolerance test characterized by early hyperglycemia and late hypoglycemia. Such test results are also seen in patients with significant liver disease and previous gastric surgery. These can be ruled out by history. Early hyperglycemia can also be seen in poorly prepared patients and those on drugs which inhibit insulin secretion, such as thiazide diuretics or Dilantin®.

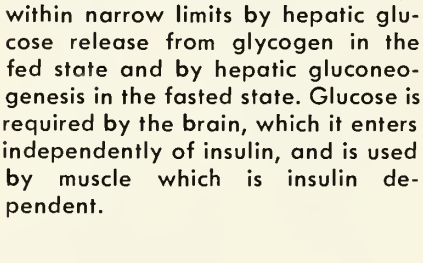


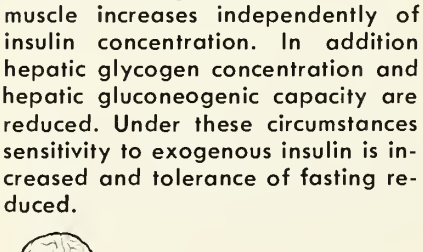
FIGURE 1
Under normal circumstances the blood glucose concentration is kept within narrow limits by hepatic glucose release from glycogen in the fed state and by hepatic gluconeogenesis in the fasted state. Glucose is required by the brain, which it enters independently of insulin, and is used by muscle which is insulin dependent.

The pathophysiology of hypoglycemia in the early diabetic is not clear. Whereas insulin secretion is delayed in the diabetic and hyperinsulinemia occurs late following a glucose load, there do not appear to be any systematic differences in either early or late insulin concentrations between patients with mild diabetes who have hypoglycemia and those who do not. Therefore, those patients who develop hypoglycemia in early diabetes and those who do not cannot be differentiated by insulin values. In obese, mildly diabetic patients, hyperinsulinemia is relatively common and of itself has no significance. In contrast to the situation in fasting hypoglycemia where insulin concentrations may be very helpful (as discussed below), insulin concentrations are of little or no value in the evaluation of reactive hypoglycemia.

In addition to reactive, non-fasting hypoglycemia, patients with diabetes may develop fasting hypoglycemia due to causes similar to those which affect the non-diabetic, i.e., diabetic patients may develop pituitary and adrenal insufficiency, islet cell tumors, large extra-pancreatic tumors, liver disease, and/or pancreatitis with resultant hypoglycemia. There is no evidence that patients with mild diabetes are more prone to develop these syndromes than the non-diabetic.

The diagnosis of these particular syndromes obviously depends upon a history of fasting hypoglycemia and specific historical findings such as post partum headaches or amenorrhea, suggestive of a pituitary infarction, or a history of tuberculous infection or other evidence of adrenal insufficiency. Fasting hypoglycemia (blood sugars below 50 mg% in a patient on no drugs after an overnight fast) is always a serious finding that requires thorough evaluation in a hospital setting. Whereas the differential diagnosis of fasting hypoglycemia is beyond the scope of this article, it is worthwhile for us to review briefly the pathophysiology of hypoglycemia in these syndromes.

FIGURE 2
In the absence of pituitary or adrenal hormones glucose utilization by muscle increases independently of insulin concentration. In addition hepatic glycogen concentration and hepatic gluconeogenic capacity are reduced. Under these circumstances sensitivity to exogenous insulin is increased and tolerance of fasting reduced.



Normally the blood glucose concentration is maintained by the

Acknowledgement: The review of this paper by F. Vinicor, M.D., and S. E. Fineberg, M.D., and the manuscript preparation by Ms. Claudia VanNoy are appreciated.

ver by glucose release from gly-
ogen and gluconeogenesis *(Figure*
). Glucose is necessary for normal
unctioning of the brain, which
ses glucose even in the absence of
nsulin, and muscle which requires
nsulin. When fasting is prolonged
ore than 12-24 hours, glycogen
ecomes depleted and gluconeo-
enesis is necessary to maintain
lood sugar.

In pituitary or adrenal insuffi-
ency, hypoglycemia results from
ncreased peripheral tissue sensitiv-
y to insulin *(Figure 2)*. There is
ecent evidence to suggest that the
umber of insulin receptors on a
rget cell is regulated by adrenal
ormones. It is likely that the ab-
ence of the adrenal hormones in
ituitary insufficiency is the most
nportant factor in insulin sensi-
vity in this syndrome. In addition
o the increased peripheral insulin
ensitivity, the liver glycogen con-
nt is decreased and the hepatic
apacity for gluconeogenesis is re-
uced. Thus, in the patient with
ituitary or adrenal insufficiency,
he rate of glucose utilization in
eripheral tissues is increased, and
he ability of the liver to produce
lucose either from glycogen or
e novo is reduced. In these
rcumstances even a brief (12
ours) fast may be associated with
rofound hypoglycemia.

Islet cell tumors produce hypo-
lycemia, of course, by producing
xcess insulin, which increases
eripheral utilization of glucose,
revents glycogenolysis, and inhibits
luconeogenesis *(Figure 3)*. Extra-
ancreatic tumors cause hypogly-
emia in a variety of ways. First of
ll, they may produce insulin or
nsulin-like substances; this appears
o be extremely rare. Secondly,
eoplastic tissue may use glucose
t a rate more rapid than the liver
an produce it. Hypoglycemia of
his type has not been reported in

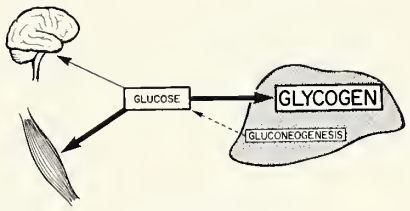
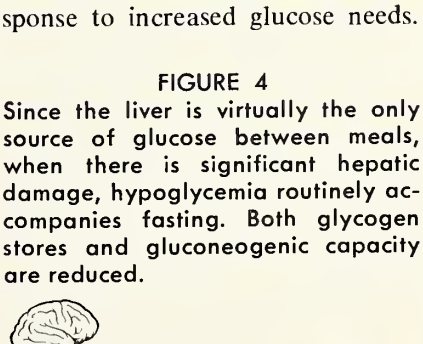


FIGURE 3
In the presence of excess insulin (islet cell tumors) or insulin-like activity (some abdominal neoplasms) glucose uptake by muscle is increased and glucose release by liver is decreased. Glycogen is stored, but not released and gluconeogenesis is virtually absent.

the diabetic patient without metastasis to either the liver or adrenals. Some tumors appear to produce a factor or factors which specifically inhibit hepatic glucose release. Finally, extrahepatic tumors can invade the liver or adrenals, causing hepatic or adrenal insufficiency.

Severe liver disease results in hypoglycemia primarily because the liver is the major source of new glucose via glycogenolysis and gluconeogenesis, two biochemical processes necessary to maintain blood sugar in the fasting state *(Figure 4)*. Thus, hypoglycemia occurs in these patients upon short fast because they are not able to store or mobilize glucose in response to increased glucose needs.

FIGURE 4
Since the liver is virtually the only source of glucose between meals, when there is significant hepatic damage, hypoglycemia routinely accompanies fasting. Both glycogen stores and gluconeogenic capacity are reduced.



Hypoglycemia after an overnight fast is also very common in acute infectious hepatitis, but it is rarely symptomatic.

Hypoglycemia has been reported in acute pancreatitis. The pathophysiology has not been well worked out, but may reflect increased insulin release in response to the inflammation of the pancreas. It is also possible, of course, that decreased glucagon release, with subsequent insufficient glycogenolysis and gluconeogenesis, occurs in this situation. In any case, this is a rare cause of hypoglycemia.

HYPOGLYCEMIA ASSOCIATED WITH ORAL HYPOGLYCEMIC AGENTS

Oral hypoglycemic agents all produce hypoglycemia as a therapeutic effect. In general, the drugs bring high blood sugars to normal, but under certain circumstances profound and prolonged hypoglycemia may occur. Hypoglycemia as a result of the administration of therapeutic doses of phenformin has not been reported. All the sulfonylureas may cause hypoglycemia, usually after the patient has been on the drugs for some time.

The mechanisms of action of the oral hypoglycemia agents differ when administered acutely or chronically. Acutely, they all stimulate insulin release. However, chronic administration results in fasting insulin concentrations which are not increased. Therefore their mechanism of action is not insulin release *per se*. Recent studies have suggested that the sulfonylureas work chronically by increasing the sensitivity of the glucose receptor in the pancreas. Thus, following a rise in glucose, the diabetic pancreas will produce more insulin in the presence than in the absence of sulfonylureas. This is not a permanent effect since cessation of the sul-

fonylureas will result quickly in a decreased insulin release in response to glucose. There is also evidence that they may have direct effects on reducing hepatic glucose production and/or increasing insulin receptors. The role of these effects in the chronic action of sulfonylureas remains to be established.

Turning to the situations under which hypoglycemia occur with the sulfonylureas, the hypoglycemia almost always occurs after the patient has been on the drug for some time. The hypoglycemia that results from oral agents is usually insidious *(Figure 5)*. Cerebral rather than epinephrine-like symptoms predominate, and because most of the patients are elderly, the hypoglycemia is frequently misdiagnosed as a stroke. The hypoglycemia is also prolonged, lasting several days. All patients should be hospitalized at least overnight and never sent home directly from the emergency room.

The vast majority of the patients are elderly; over half are over 60. Eighty per cent of the patients with hypoglycemia secondary to oral agents have significant renal or hepatic disease. All the sulfonylureas are metabolized by the liver except chlorpropamide. In the presence of abnormal liver function, these agents accumulate and hypoglycemia results. The metabolic product of hepatic action is inactive in all cases except acetylhexamide. The first metabolic product of acetylhexamide is metabolically active and needs to be secreted by the kidney. In addition, in the presence of hepatic disease as mentioned above, glycogen stores and gluconeogenic capacity are both decreased; therefore, the response to hypoglycemia is limited.

In a large series of patients with drug-induced hypoglycemia, decreased food intake was a precipitating factor in almost half of the

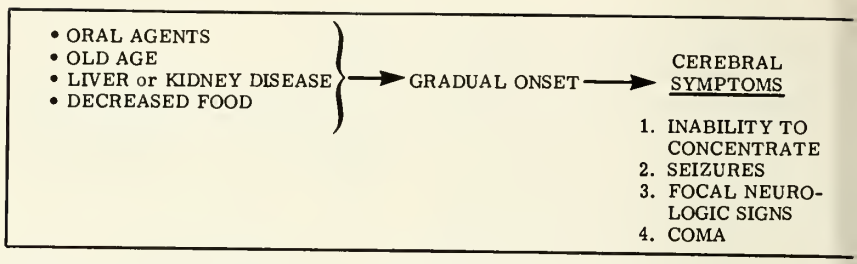


FIGURE 5

Gradual onset of hypoglycemia in the elderly patient is frequently misdiagnosed as a stroke. Blood glucose obtained routinely in the above circumstances may reveal unexpected hypoglycemia.

patients. Frequently, this was associated with a spontaneous attempt on the part of the patient to lose weight, although occasionally it was secondary to an intercurrent illness. Usually, two or more meals were missed before the hypoglycemia became severe enough to cause symptoms. This is a very important observation, which makes patient education regarding diets extremely important if we are to avoid serious hypoglycemia.

Hypoglycemia can be precipitated in patients on oral hypoglycemic agents by the administration of a second drug or an endocrine deficiency. For example, phenylbutazone and aspirin have intrinsic hypoglycemic activity. Hypoglycemia associated with oral hypoglycemic agents occurs in patients with pituitary or adrenal insufficiency. Adrenal insufficiency occurs in patients with diabetes more commonly than would be expected by chance alone. In a report of 80 cases of adrenal insufficiency, approximately 20 cases of co-existent diabetes mellitus was found. Although uncommon, the onset is insidious enough that it should be thought about in patients who have severe and profound hypoglycemia but who otherwise have been under good control. In general, the diabetes precedes the adrenal insufficiency by an average of six years. Occasionally, the adrenal insufficiency comes before diabetes and in approximately 4% of the cases they occur simultaneously.

Patients on oral hypoglycemic agents can, of course, develop hypoglycemia secondary to islet cell tumors and extra pancreatic tumors. These cases can be extremely difficult to diagnose and only a high index of suspicion will allow one to make this diagnosis. Perhaps the best clue in this situation is the absence of the above factors and the presence of debilitating disease such as weight loss, anemia, or other systemic symptoms. We will discuss further the diagnosis of islet cell tumors in the last section.

HYPOGLYCEMIA ASSOCIATED WITH INSULIN THERAPY

Most commonly, hypoglycemia in the diabetic patient is associated with insulin therapy *(Figure 6)*. In general, the etiology of the hypoglycemia is obvious: the patient has decreased the amount of food or skipped a meal, the patient has made an error in insulin dosage, or the patient has increased his exercise without appropriate alteration of diet or insulin therapy. It is obvious that a careful history should elicit these occurrences so that appropriate adjustments can be made.

The so-called Somogyi effect also occurs commonly. In this situation the patient's blood sugars are high

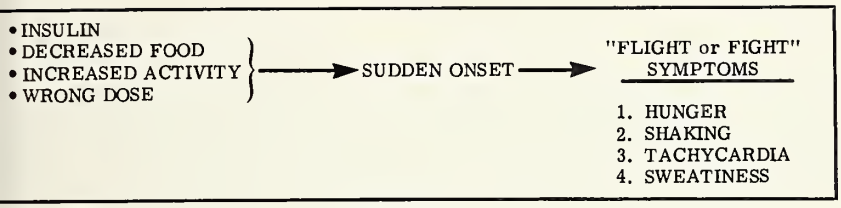


FIGURE 6
Classic insulin-induced hypoglycemia is rarely misdiagnosed.

on rising and normal or slightly vated during the day, only to fall extremely low levels at night. In dies of patients with constant 24-ur glucose monitoring, it has en discovered that even well ntrolled juvenile diabetics have poglycemia between midnight d 5 a.m. Apparently there is a rnal variation in the sensitivity the body to insulin, such that ounts of insulin which would be propriate in the early evening are cessive at night. If this phenom-on is not carefully looked for, phy-ians may find themselves treating e reactive hyperglycemia which lows the hypoglycemia by giving ore and more insulin until the pa-nt awakens with a severe hypo-cemic reaction or seizure. If the mogyi effect is suspected, then rly morning blood sugars should obtained. All patients on inter-ediate acting insulin should have adequate snack before bedtime order to prevent this phenom-on.

Patients on insulin can develop uitary or adrenal insufficiency. ne occurrence of severe hypogly-mia in a patient who has been eviously well controlled should ouse this suspicion. Pituitary in-fficiency was introduced a few ars ago in treatment of dia-tic retinopathy. We know that tuitary ablation will cause an ap-oximate 40% decrease in insulin quirements without altering the stability of the diabetes. Pituitary sufficiency in diabetic patients as associated with a high mortality, and approximately 25% of the patients who died in the first five years after the procedure died of severe hypoglycemia.

The differential diagnosis of islet cell tumors in the diabetic on insulin is quite difficult and will be discussed below. Extra-pancreatic tumors, of course, may occur in the diabetic patient and can be associated with hypoglycemia. This appears to be a rare phenomenon.

Approximately two-thirds of endogenous insulin is cleared by the liver before it reaches the peripheral circulation; approximately two-thirds of insulin which reaches the peripheral circulation, including exogenous insulin, is cleared by the kidney. Thus, in the patient with severe liver or renal disease, hypoglycemia may occur. As mentioned above, liver disease is also associated with other reasons for having hypoglycemia (decreased glycogen storage and gluconeogenic capacity). Thus, liver disease is associated with severe and profound hypoglycemia and increased insulin sensitivity in the diabetic patient. In renal disease insulin requirements also fall and hypoglycemia can occur. Frequently, this decrease in insulin requirement is the first clinical sign that renal disease is developing. This occurs because the renal clearance of insulin is profoundly decreased. It also should be mentioned that pregnancy is associated with a marked increase in insulin sensitivity in the first three months. It should be considered in differential diagnosis of recurrent hypoglycemia in the fertile female.

FACTITIOUS HYPOGLYCEMIA AND ISLET TUMORS

The final type of hypoglycemia to be discussed is factitious hypoglycemia in the diabetic patient. In a recent review of hypoglycemia, factitious hypoglycemia secondary to oral agents and/or surrepitious insulin injection was as common as hypoglycemia due to an islet cell tumor. It should be suspected in any diabetic patient with unexplained hypoglycemia since he has both knowledge of and the access to hypoglycemic agents. It should also be suspected in near relatives of diabetic patients and in medical personnel. It can be an extremely difficult diagnosis to make. In approximately half of the patients the diagnosis of factitious hypoglycemia has been made only after an extensive pancreatic resection has failed to correct the hypoglycemia. On clinical grounds, the diagnosis can be suspected in patients who have a history of mental instability and access to insulin or oral agents. It is our feeling the hypoglycemia secondary to surreptitious administration of insulin is so common that it should be ruled out before most patients are explored for pancreatic tumors. In the insulin dependent diabetic patient the diagnosis is complicated by the presence of antibodies to insulin, making insulin immunoassay impossible to perform.

The appropriate diagnostic workup is first to determine if the patient is having recurrent hypoglycemia in the fasting state which cannot be explained by other circumstances. At this point hospitalization is indicated; the diet and insulin or oral agents should be carefully adjusted. If the hypoglycemia persists, the differential diagnosis

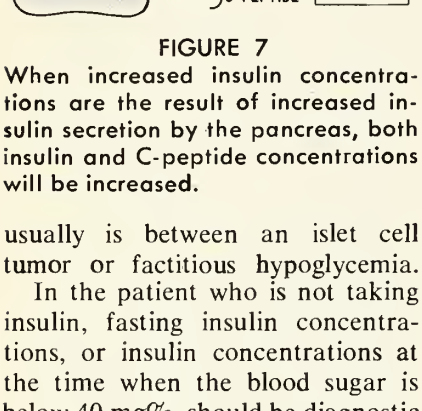


FIGURE 7

When increased insulin concentrations are the result of increased insulin secretion by the pancreas, both insulin and C-peptide concentrations will be increased.

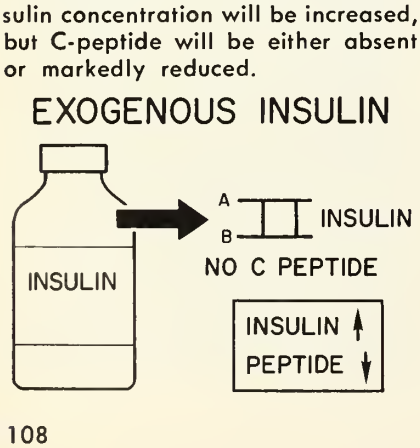
usually is between an islet cell tumor or factitious hypoglycemia.

In the patient who is not taking insulin, fasting insulin concentrations, or insulin concentrations at the time when the blood sugar is below 40 mg%, should be diagnostic since the insulin concentration should be below 15 micro units/ml. If the patient is taking surreptitious insulin, insulin concentrations will also be high. An additional tool is now available to differentiate between endogenous and exogenous insulin. C-peptide is secreted in equal molar amounts to insulin. In endogenous hyperinsulinemia, the C-peptide concentration will be increased in proportion to the insulin concentration, i.e., the C-peptide concentrations will be abnormally high in the patient with hypoglycemia secondary to endogenous insulin secretion *(Figures 7 and 8)*. Thus, the patient who has high insulin concentrations without an increase in C-peptide concentration has factitious hypoglycemia secondary to insulin injection. Increased C-peptide, therefore, rules out exogenous insulin injection because exogenous insulin does not contain C-peptide.

Increased C-peptide is seen in both the patient who has an insul secreting tumor and in the patie who is factitiously taking an or hypoglycemic agent. In a patie who has both high C-peptides ar high insulin concentrations, we b lieve that a serum screen f sulfonylureas should be obtain prior to pancreatic surgery. This especially true if no pancreat lesion can be found by ultrasour or CT-scan.

FIGURE 8

When exogenous insulin is injected no C-peptide is present. Thus, insulin concentration will be increased, but C-peptide will be either absent or markedly reduced.



REFERENCES

General:

1. Merimee, T: Spontaneous hypoglycemia in man. *Advances Int. Med.*, 301-317, 1977.
2. Conn, J, Pek, S: Current concepts on spontaneous hypoglycemia. *Current Concepts Series,* Upjohn Co., Kalamazoo, Mich., 1970.
3. Pfeiffer, EF, Thum, Ch, Raptis, S, Beischer, W, Ziegler, R: Hypoglycemia in diabetics. *Hypoglycemia—Proceedings of the European Symposium, Rome,* 112-126, 1976.

Fasting Hypoglycemia:

4. Arky, R: The fasting hypoglycemias. *Diseases of the Month.* Yearbook Medical Publishers, 1968.
5. Fajans, S, Floyd, J: Fasting hypoglycemia in adults. *N. Engl. J. Med.*, 294:766-772, 1976.
6. Merimee, T, Tyson, J: Stabilization of plasma glucose during fasting: Normal variations in two separate studies. *N. Engl. J. Med.*, 291:1275-1278, 1974.
7. Service, J, *et al:* Insulinoma: Clinical and diagnostic features of 60 consecutive cases. *Mayo Clin. Proc.* 51:417-429, 1976.
8. Kahn, SR, *et al:* Ectopic production of chorionic gonadotropin and its subunits by islet cell tumors. *N. Engl. J. Med.*, 297:565-569, 1977.
9. Schein, P, *et al:* Islet cell tumors: Current concept and management. *Ann. Intern. Med.*, 79:239-257, 1973.
10. Broder, LE, Carter, SK: Pancreatic islet cell carcinoma: Clinical features of 52 patients. *Ann. Int. Med.*, 79: 101-107, 1973.
11. Broder, LE, Carter, SK: Pancreatic islet cell carcinoma: Results of therapy with streptozotocin in 52 patients. *Ann. Int. Med.*, 79:108-118, 1973.

Reactive Hypoglycemia:

12. Hofeldt, F: Reactive hypoglycemi *Metabolism,* 24:1193-1208, 1975.
13. Vinicor, F: Reactive hypoglycemi *Hospital Medicine,* December 197
14. Permitt, A: Postprandial hypoglyc mia. *Diabetes,* 25:719-733, 1976.

Alcohol-Induced Hypoglycemia:

15. Frienkel, N, *et al:* Alcohol hypogl cemia IV: Current concepts of pathogenesis. *Diabetes,* 14:350-36 1965.
16. Madison, L: Ethanol-induced hyp glycemia. *Adv. Metab. Disord.*, 3:8 109, 1968.

C-peptide:

17. Rubenstein, A, *et al:* Clinical sign icance of circulating C-peptide diabetes mellitus and hypoglycem disorders. *Arch Intern. Med.*, 13 625-632, 1977.
18. Hurwitz, D: Circulating serum peptide: A brief review of diagnos implications. *N. Engl. J. Med.*, 29 207-209, 1976.

Drug-Induced Hypoglycemia:

19. Seltzer, H: Drug-induced hypoglyc mia: A review based on 473 case *Diabetes,* 21:955-966, 1972.

Factitious Hypoglycemia:

20. Scarlett, J, *et al:* Factitious hypogl cemia: Diagnosis by measuremer of serum C-peptide immunoreactivi and insulin-binding antibodies. *Engl. J. Med.*, 297:1029-1032, 197
21. Jorden, R, *et al:* Sulfonylurea-induc factitious hypoglycemia. *Arch. Inte Med.*, 137:390-393, 1977.

SCRIPTION: Methyltestosterone is 17β-Hydroxy-Methylandrost-4-en-3-one. **ACTIONS:** Methyltesto-rone is an oil soluble androgenic hormone. **DICATIONS:** In the male: 1. Eunuchoidism and nichism. 2. Male climacteric symptoms when these are condary to androgen deficiency. 3. Impotence due to drogenic deficiency. 4. Post-puberal cryptochidism h evidence of hypogonadism. Cholestatic hepatitis h jaundice and altered liver function tests, such as reased BSP retention, and rises in SGOT levels, have en reported after Methyltestosterone. These changes pear to be related to dosage of the drug. Therefore, in presence of any changes in liver function tests, drug ould be discontinued. **PRECAUTIONS:** Prolonged sage of androgen may result in sodium and fluid ention. This may present a problem, especially in tients with compromised cardiac reserve or renal ease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
1200 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Notes from

The Royal College of Surgeons of England

AUSTIN L. GARDNER, M.D.
Indianapolis

Sir Rodney Smith in the Telford Memorial Lecture writes of "The Patient With Cancer and His Doctor" and this essay will strike a chord of recognition in all physicians.* As one reads, it is clear that this humble man has cared for many patients with cancer and his personal observations and strong convictions in matters of assessment, statistics, aims, truth and the support for the dying patient are interspersed with beautiful quotations from Shakespeare and others. Milton wrote of his own blindness, "It is not miserable to be blind, it is miserable to be incapable of enduring blindness," and this applies to many problems.

* * *

Sir Rodney Smith is in agreement with Dr. Englebert Dunphy who pleas for the gentle care of the terminally ill patient: "One should ask the patient about his pain, listen to his chest, do a general examination—pay attention to details. Above all, touch the patient, shake hands, take the pulse, and gently palpate the areas of pain."

* * *

There are many fine articles in this issue. The Hunterian Lecture was given by R.E. Jenner, F.R.C.S., on "New Perspectives on Biliary Atresia." Mr. Jenner disputes the congenital basis of etiology and also a more recently suggested virus basis and proposes bile acid ductal injury as the cause.

* * *

J.D. Atwell, F.R.C.S., assesses "Changing Patterns in Pediatric Surgical Care." Nicoll in 1909 reported the out-patient care of 8,988 patients at the Glasgow Royal Hospital for Sick Children including 406 with hare lip, 18 with pyloric stenosis, 36 with spina bifida, 220 with hernia. Nicoll was appointed as an outpatient surgeon without admitting rights!

* * *

The role of resection in typhoid perforation by M.J. Kuruvilla of Iran was carefully reviewed and the success of vigorous surgical management described. The rarity of this entity in our experience adds interest to the problem faced in other parts of the world. The results were better than expected.

* * *

A report on John Hunter as an expert witness in the defense of a man accused of murdering his brother-in-law with arsenic was reported by E.H. Cornelius. The circumstantial evidence was overwhelming and despite John Hunter's doubts, the jury found the prisoner guilty after nine minutes of deliberation and Donellan, the defendant, was executed three days later. The great variety of studies that John Hunter carried out were emphasized by the defense attorney including experimental poisoning.

Consideration in pediatric surg
cal care included neonatal surger
outpatient surgery, and even discu
sion of children's play in the hosp
tal. Concerning the play things in
children's room, "a variety of to
to please the child, which should b
colored, light, musical, and beaut
ful and not sharp-pointed," wa
quoted from an Indian physicia
named Charak Samhita in 600 B.C

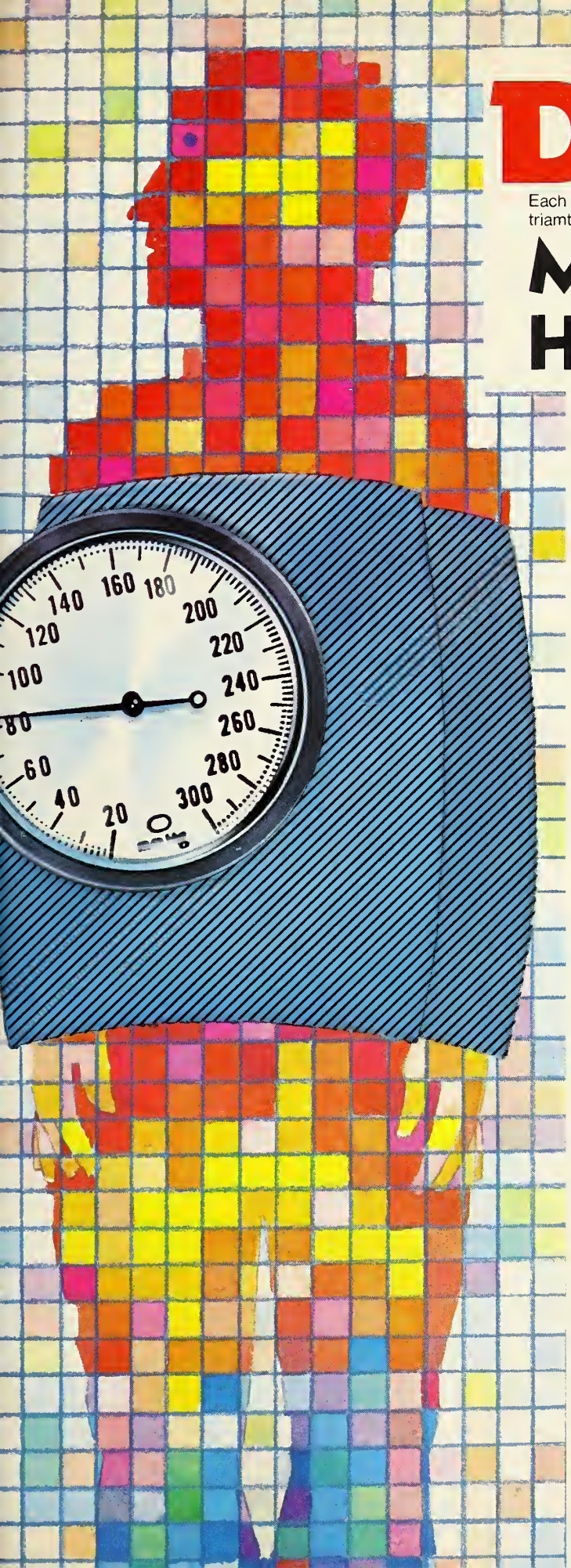
* * *

The indolence of duodenal u
cers was studied carefully by ele
tron microscopy and the use
fibrocystic choledochoscopy in com
mon bile duct surgery documented

* * *

The final article has to do wit
the admission to honorary membe
ship of H.R.H. The Prince
Wales, K.G., K.T., P.C., G.C.I
Prince Charles gave a hearty ac
ceptance speech and quoted a pub
lic opinion poll by a daily newspa
per regarding the National Healt
Service that reported nine of 1
people considered their docto
kind, capable, and considerate. Sev
en of 10 thought the treatment the
received from hospital doctors wa
very good. Prince Charles was bor
the same year that the Nationa
Health Service was founded. H
then asked, "Looking at us both
which do you think has survived th
passing years best?"

*The information in this review is based on the September 1978 issue of the Annals of the Royal College of Surgeons of England.



Dyazide®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Makes Sense in Hypertension*

Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:

* **Warning**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K+ frequently; both can cause K+ retention and elevated serum K+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

SK&F CO.
a SmithKline company
Carolina, P.R. 00630


When painful spasm
is the presenting
symptom...

n functional G.I. disorders*

Bentyl®

(dicyclomine hydrochloride USP)

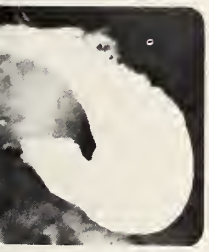
0 mg. capsules, 20 mg. tablets,
0 mg./5 ml. syrup, 10 mg./ml. injection

elps control abnormal motor activity
vith minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

this double-blind study, twenty patients having G.I. series and exhibiting
pasm were randomly selected to receive either 2 cc. of Bentyl or sodium
hloride intramuscularly. Ten minutes after the injection another radiograph
as taken . . .

. Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride
roduced relaxation in only 3 of 10. No side effects occurred in either group of patients.



lorospasm has
most totally blocked
ssage of barium
eal.



Barium meal beginning
to pass 10 minutes
after intramuscular
injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

his drug has been classified "probably" effective in treating
tain functional G.I. disorders.

ee Warnings, Precautions and Adverse Reactions.

e following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964

Merrell

97 (Y515A)

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection
AVAILABLE ONLY ON PRESCRIPTION.

Brief Summary
INDICATIONS
For use as adjunctive therapy in the treatment of peptic ulcer.
IT SHOULD BE NOTED AT THIS POINT IN TIME THAT THERE IS A LACK OF CONCURRENCE AS TO THE VALUE OF ANTICHOLINERGICS/ANTISPASMODICS IN THE TREATMENT OF GASTRIC ULCER. IT HAS NOT BEEN SHOWN CONCLUSIVELY WHETHER ANTICHOLINERGIC/ANTISPASMODIC DRUGS AID IN THE HEALING OF A PEPTIC ULCER, DECREASE THE RATE OF RECURRENCES, OR PREVENT COMPLICATION

Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FDA has classified the following indications as "probably" effective.

May also be useful in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, acute enterocolitis, and functional gastrointestinal disorders); and in neurogenic bowel disturbances (including the splenic flexure syndrome and neurogenic colon).

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: autonomic neuropathy; hepatic or renal disease, ulcerative colitis–Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon; hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension; hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.
It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention, blurred vision and tachycardia, palpitations, mydriasis, cycloplegia, increased ocular tension, loss of taste, headache, nervousness; drowsiness; weakness; dizziness, insomnia; nausea; vomiting; impotence; suppression of lactation; constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.
Usual Dosage: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.
Product Information as of October, 1976

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Guest Editorial

Problem Solving

L. A. ARATA, M.D.
Shelbyville

According to recent publications by various ex-Washingtonians, many of our national elected "statesmen" are troubled people with problems of alcoholism, bribes, mistresses, etc. It must be a discouraging occupation, but few of them are discouraged—most seem anxious to try again to be re-elected.

It seems to me that the most discouraging aspect of it all is to see that none of the government programs really do much toward solving the problems they were created to solve; most of the programs only add to or compound the problems. Of course, a government program, conceived in fantasy thinking, sired by a pressure group, given birth by a congressional sub-committee, and nurtured by the bureaucracy can hardly be expected to be other than the fiasco that it turns out to be. Are our congressmen so stupid that they are unable to comprehend all this?

Unable to solve our domestic problems, our discouraged politicians seem to turn to the international scene in the hopes of achieving some success. Unable to do much with the USA racial problem, they show their wisdom in solving Rhodesia's and South Africa's racial problems. They have the glib answers to the problems of 8,000 miles away, though they lack the answers to the racial problems of Washington, D.C. Unwilling to come to grips with our energy problems, they discourage other sovereign nations from solving their own by discouraging nuclear power development there. Unwilling to attempt solutions to the illegal alien problem in the USA, they have solutions for the Palestinians, and so forth, *ad nauseam*.

A couple of things that our nation needs very badly are a moderate dose of intelligence exercised in Washington, and something to protect the American citizens from the plethora of Washington "solutions." A few years ago, we had "Watergate" which kept Washington and Congress in such a dither for several months that the American people were great winners. For a time in 1978, it looked as though the "Koreagate" scandal might give the Americans another respite from the depredations of our government. Unfortunately, Congress was able to quiet that scandal down and whitewash it over.

Where, oh where, can we find something else now to protect us from the monstrosity that has been created in Washington by our own elected officials?

Management of Coronary Artery Disease: Medical or Surgical?

WILLIAM K. NASSER, M.D.
Indianapolis

CORONARY ATHEROSCLEROSIS is highly prevalent in the United tes and is a major cause of th. It is estimated that more than million individuals in the ited States, mostly men between ages of 40 and 59 years, have tructive coronary artery dis-e,[1] that there are 150,000 to 0,000 new cases of angina toris per year,[2] and that more n 500,000 deaths per year re-.[1,2]

In 1971, over 20,000 aortocoro-y bypass grafts were done[3,4] at a t of more than $125 million.[4,5] ce then, coronary artery surgery increased fourfold. With over 00 trained surgeons in cardio-racic surgery in the past 15 rs[2] and over 4,000 hospitals ipped to do cardiac surgery,[2,4] at st 150,000 operations could be ie annually,[2] approximating the mber of new cases of angina each r. Therefore, the magnitude in ating coronary artery disease h medical versus surgical therapy quite obvious from a socioeco-mic standpoint.

It becomes imperative, therefore, determine the immediate and late ks to life of non-operative treat-nt versus operative intervention patients with coronary artery dis-e and to determine the chances of significantly altering the quality of life and/or arresting the progression of atherosclerotic coronary artery disease.

To answer two of these questions in a rational manner, both the natural history of coronary artery disease and the early and late effects of operative treatment must be known. A major problem has been to have such information in matched groups of patients whose condition has been carefully characterized by cardiac catheterization, angiography and other objective methods. Only in recent years some prospective studies of the natural history in such patients have become available and, even after many years of treatment, there continues to be inadequate prospective information on post-operative history.

Although there have been no large, prospective randomized studies on the natural history of coronary artery disease, when comparing medical versus surgical therapy, the best available studies on the natural history of coronary artery disease to date have been those of Reeves and co-workers[6] and Bruschke *et al.*[7] The presence and extent of coronary artery disease in both studies was documented by coronary arteriographic findings. The data available in both prospective studies showed an annual mortality rate of 3% in patients with single vessel coronary artery disease, 7-10% in those with double vessel disease and 11-19% in patients with triple vessel disease.

These authors[6,7] analyzed an additional important risk factor in the prognosis of such patients: the degree of myocardial involvement. In their data, mortality was increased threefold, if clinical symptoms of left ventricular failure were present in patients with two or three vessel coronary artery disease and patients with two vessel disease had six times the mortality rate if heart volume (calculated by plain roentgenography) was increased.

It becomes obvious that treatment of coronary artery disease, medical or surgical, must take into account not only the presence of angiographically documented obstructive coronary artery disease, but also left ventricular function and clinical symptomatology.

Treatment goals for coronary artery disease, medical or surgical, should include the following: prolonged survival, decreased cardiovascular morbidity, relief of angina pectoris and improved quality of life. Of these four goals, survival is the most unequivocal and definitive to evaluate, provided adequate follow up information is available. Because of its often variable and unpredictable course, the efficacy of treatment intervention in coronary artery disease remains difficult to assess. Although surgical intervention is popular and in most cases improves the quality of life, relieves angina and probably decreases cardiovascular morbidity, there are no prospective randomized studies showing that surgical bypass grafting prolongs survival. An exception appears to be the sub-group of patients with chronic stable angina pectoris and left main coronary artery disease in whom increased survival with operation has been observed by several authors.

author is Clinical Associate Profes-of Medicine, Indiana University ool of Medicine, and Director of diac Catheterization Lab, St. Vincent spital & Health Care Center, Indian-lis.

The advent of coronary arteriography by Sones and co-workers[8] was an initial breakthrough in the treatment of coronary artery disease. Following this report, several cardiovascular centers and cardiologists became interested and coronary arteriography became the "gold standard" for the presence, severity and extent of coronary arterial disease. Although the indications for coronary arteriography were initially quite limited, increasing experience with this procedure has broadened the list to such an extent that the indications for coronary arteriography can be simply stated as "the need to know."

The medical treatment of coronary artery disease, with or without cardiac decompensation, has markedly improved in recent years. The development of new anti-arrhythmic agents has helped to prolong life in medical and even surgical patients. Vasodilator therapy (short, intermediate and long-acting nitrates) and betablocking agents are not only capable of preventing and relieving angina pectoris, but some authorities feel that they may even have a beneficial effect in survival. In fact, one Veterans Administration cooperative study,[9] in an attempted prospective randomized study of 596 patients, suggested that there was no statistical significant difference in survival, at a minimum follow up interval of 21 months between patients treated medically and those treated with saphenous vein bypass grafting. At 36 months, 87% of the medical group and 88% of the surgical group were alive. Although this is a preliminary report of randomized survival data on the medical versus surgical treatment of patients with coronary artery disease, there has been considerable criticism and controversy concerning the validity of this study. A major objection to this study revolves around the 5.6% surgical mortality, which is much higher than the present acceptable 1-2% surgical mortality performed at most good cardiovascular centers.

HISTORY

Prior to the advent of coronary arteriography, there were several unsuccessful surgical attempts for the relief of angina pectoris. The first surgical attempt included cervical sympathectomy in 1916. Following this, Beck attempted to increase myocardial blood flow from pericardium via the epicardium. Both of these surfaces were abraded mechanically and various irritants were applied. Subsequently, pedicles of pectoralis muscle, omentum, spleen, stomach and jejunum were applied in the hope that vascular ingrowth would occur. These procedures all met with failure.

During the decade from 1945 to 1955, occlusion of the coronary sinus, arterial anastomosis to the coronary sinus (arterial perfusion of the coronary sinus), and bilateral ligation of the internal mammary arteries were used. These procedures were discredited after randomized double-blind studies showed no difference in results between the surgical procedure and a "sham" operation.

In 1946, Vineberg[10] implanted the internal mammary artery into the left ventricular myocardium. Controversy as to the efficacy of this procedure still lingers. However, because of the small flow to the myocardium, the six- to 12-month period required for symptomatic relief and the absence of evidence that coronary vascular reserve was favorably affected, the Vineberg procedure has largely been abandoned.

Interest in vein graft surgery for coronary artery disease began in 1967 at the Cleveland Clinic.[11] The first patient was operated on May 9, 1967. At that time, its potent was uncertain and the procedu was frequently performed in asso ation with other methods for vascularization with which grea experience had been accumulat With increasing experience and f orable early results during the n few years, bypass graft surg came to be regarded as m promising than any previous me od. As a result, coronary end terectomy, patch graft angioplas and internal mammary implantati were performed less frequently a have now been virtually abandon

An international symposium coronary artery disease was held the Cleveland Clinic in Septem 1977. Many centers presented th experience with medical versus s gical treatment of coronary art disease. The Cleveland Clinic p sented its six- to 10-year follow in patients operated on from 19

The follow up included 100% their patients. The operative mort ity in 741 patients over a 10-y period was less than 2%. The pe operative infarction rate, as e denced by new Q waves on electrocardiogram, has dropp from 6.9% prior to 1974 to 4.1 since that time. The survival of 7 patients in a composite surgi group (single, double, and tri vessel coronary artery disease w or without left ventricular dysfu tion) shows an average annual trition rate of 3.3% per year, co pared to an average annual attriti rate of 8% per year in the nonsu cal group. The differences at e interval are significant by the square analysis.

There was no significant stati cal difference in comparing surgi versus medical treatment of patie with single vessel coronary art disease. However, when medi and surgical groups of patients w double, triple, or left main coron artery involvement are compar

tantial differences in survival apparent, favoring the surgical ps. Left ventricular dysfunction incomplete revascularization ar to be major determinants of -term survival.[12]

he ultimate objective of bypass surgery for coronary artery ase would be to eliminate all of premature mortality im- d by the arteriosclerotic process its complications and to restore functional capacity of the pa- to normal, i.e., to assure a , enjoyable and productive life. ough the unpredictability of the rosclerotic process casts a low of uncertainty over any -range objectives, rehabilitation be accomplished for many pa- s.

n selecting patients for bypass ery, the major elements to be sidered are: 1) the degree of bility from symptoms; 2) the nitude and immediacy of jeop- to myocardium imposed by the onary artery lesion; 3) the unt and functional significance ny previous myocardial damage would limit the benefit from ration, and 4) the suitability of involved artery for bypass graft- with regard to its size and the lity of its "run-off."

The ideal patient who can ieve optimal benefit from surgi- treatment is significantly re- cted by his symptoms and has a ificant amount of one or more onary arteries, each sufficiently ge and free of distal disease to be ted with present bypass graft nniques. A patient with three erely stenosed arteries has a less orable prognosis and more to n from bypass graft surgery. If has only one severely stenosed ery jeopardizing an area of myo- dium, his longevity may not be greatly threatened, but he may l benefit by way of symptomatic provement. These patients have the greatest potential for rehabilitation through complete revascularization of undamaged myocardium.

The severely incapacitated patient with an extensively damaged myocardium is the poorest candidate for surgical treatment. It has been suggested that such patients, because of their extremely poor prognosis, may have the most to gain from surgery or that the risk of surgery would be better justified in these patients. Their potential for rehabilitation, however, is almost non-existent and their potential for improved longevity through surgery is only slightly better. The wisdom of subjecting a patient to an operation associated with a relatively high risk because of his limited myocardial reserve with a very limited potential for improved survival or for meaningful improvement in the quality of life, is questionable. The key to selecting patients for surgical treatment is the degree to which myocardial jeopardy can be relieved and the amount of rehabilitation which can be anticipated.

THE FUTURE

The effect of coronary artery surgery on longevity in patients with coronary artery disease, although not documented by well-controlled clinical trials, appears to be beneficial in patients with multivessel disease who still have reasonably well-preserved left ventricular function. The evidence to date suggests that bypass graft surgery can be applied to selected patients with a low risk and with a potential for improvement in symptoms as well as survival. It is anticipated that the next decade will witness new techniques for bypass graft surgery, further refinement of its indications and a better understanding of the nature and pathophysiology of coronary atherosclerotic disease.

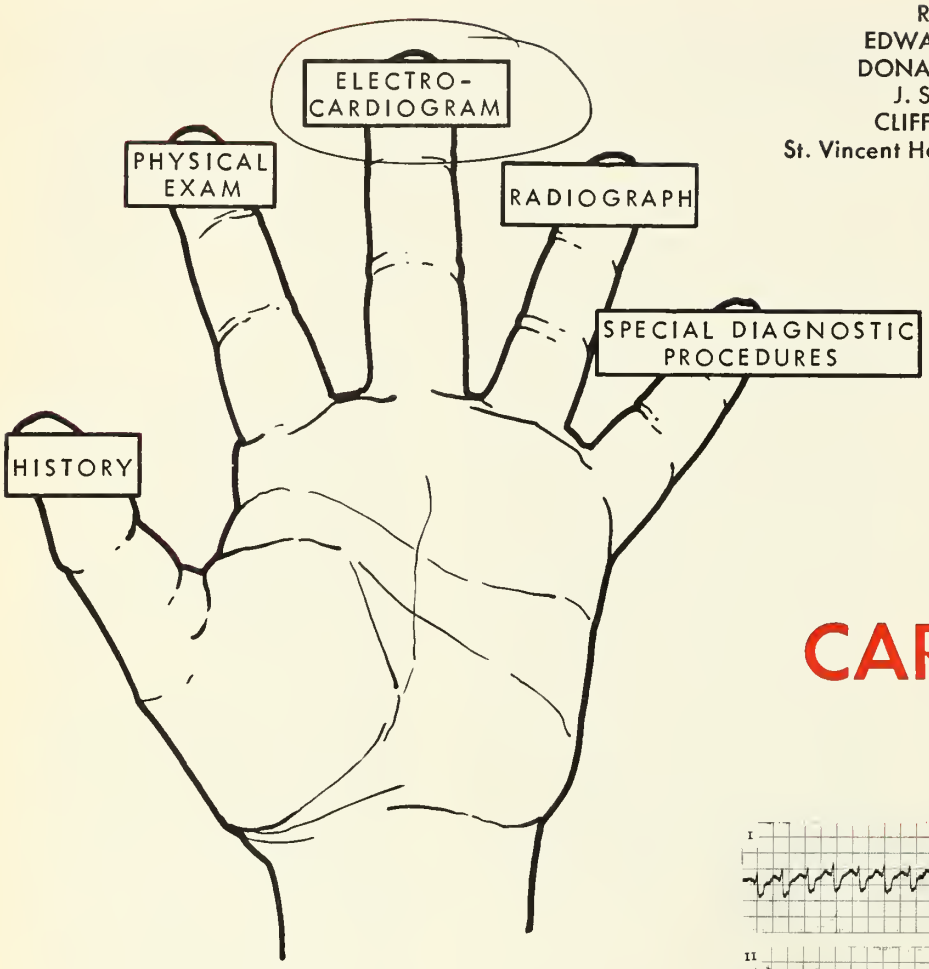
The lack of well-controlled, randomized studies comparing long-term survival in medically versus surgically treated patients with coronary artery disease, makes statistical analysis difficult. When the etiology of coronary artery disease is understood more completely, specific prophylaxis or therapy may be possible.

BIBLIOGRAPHY

1. Mullins, CB: Evaluation of coronary artery disease-surgery: One step forward (Editorial). *Annals of Internal Medicine,* 78:447, 1973.
2. Glenn, WWL: Some reflections on the coronary bypass operation. *Circulation,* 45:869, 1972.
3. Friedberg, CK: Caution and coronary artery surgery (Editorial). *Circulation,* 45:727, 1972.
4. Roche, JK, Stengle, JM: Facilities for open heart surgery in the United States. *American Journal of Cardiology,* 32:224, 1973.
5. Kotch, JB: Coronary artery surgery in social context. *New England Journal of Medicine,* 288:1245, 1973.
6. Reeves, TJ, Oberman, A, Jones, WB: Natural history of angina pectoris. *American Journal of Cardiology,* 33: 423, 1974.
7. Bruschke, VG, Proudfit, WL, and Sones, FM, Jr: Progress study of 590 consecutive non-surgical cases of coronary disease followed 5-9 years. *Circulation,* 47:1147, 1973.
8. Sones, FM, Jr, Shirey, EK: Cinecoronary arteriography. *Modern Concepts of Cardiovascular Disease,* 31:735, 1962.
9. Murphy, ME, *et al:* Treatment of chronic stable angina. *New England Journal of Medicine,* 297:621, 1977.
10. Vineberg, A, Miller, G: Internal mammary coronary anastomosis in surgical treatment of coronary artery insufficiency. *Canadian Medical Association Journal,* 64:204, 1951.
11. Favalaro, RG: Saphenous vein autograft replacement of severe segmental coronary artery occlusion: Operative technique. *Annals of Thoracic Surgery,* 5:334, 1968.
12. Sheldon, WE, *et al*: Surgical treatment of coronary artery disease—pure graft operations with a study of 741 patients followed for 3-7 years. *Progress in Cardiovascular Diseases,* 18:237, 1975.

A Self-Assessment

R. JOE NOBLE, M.D.
EDWARD F. STEINMETZ, M.D.
DONALD A. ROTHBAUM, M.D.
J. STANLEY HILLIS, M.D.
CLIFFORD C. HALLAM, M.D.
St. Vincent Hospital and Health Care Center
Indianapolis

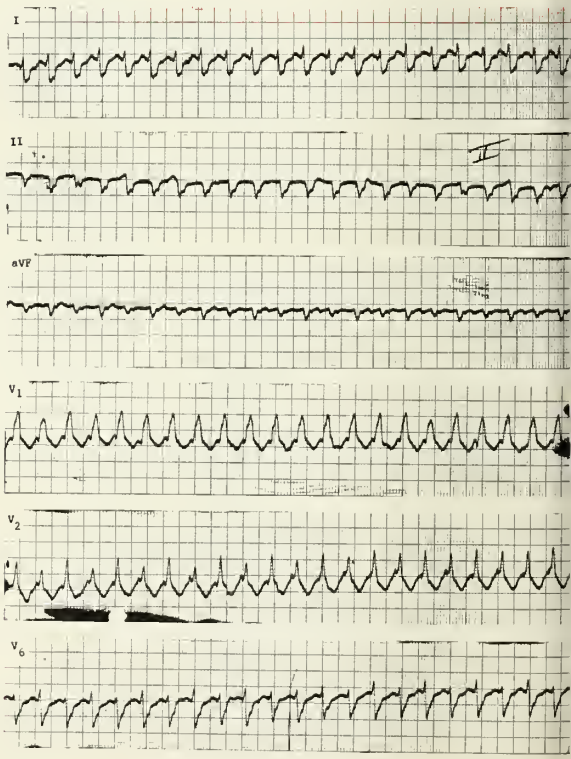


THE FIVE FINGERS OF CARDIOLOGY

What do these three electrocardiograms show in common?

The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac diagnosis.

Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.



Electrocardiogram A

NSWER:

All three ECG's demonstrate ntricular tachycardia (VT). Di-nostic features confirming VT d differentiating this from supra-ntricular tachycardia (SVT) with errancy include:

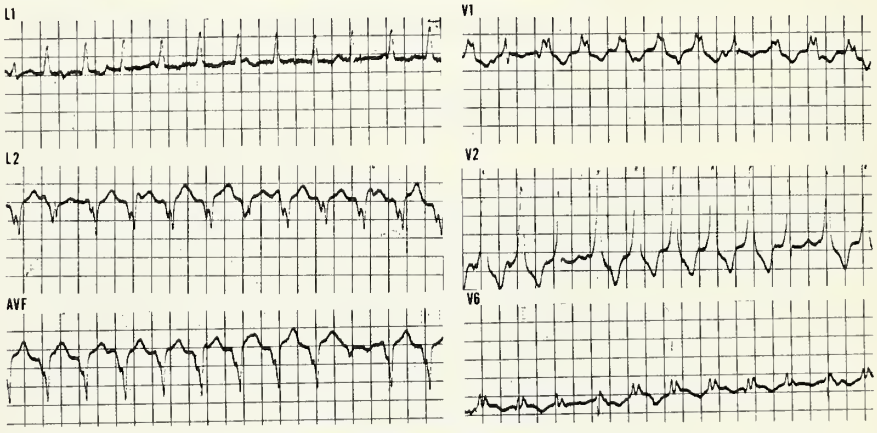
- QRS duration greater than .14 c
- Marked left axis deviation, or in lead 2
- qR configuration in V_1
- rS configuration in V_5-V_6
- AV dissociation
- Captures and/or fusions

The configuration of the QRS in *ectrocardiogram A* is: qR in V_1; in V_6 (with exceptionally deep ; and rS in Lead 2. This con-guration strongly favors the di-nosis of VT rather than SVT with errancy. Careful inspection of ead 2 disclosed p-waves at a rate 100/min, dissociated from the ntricular rate of 170/min. Meas-e the p-p interval in Lead 2 with lipers to note the changing con-guration of the QRS due to super-mposition of p on QRS (the p-aves are easily identified immedi-ely preceding the third, fifth, and venth QRS complex).

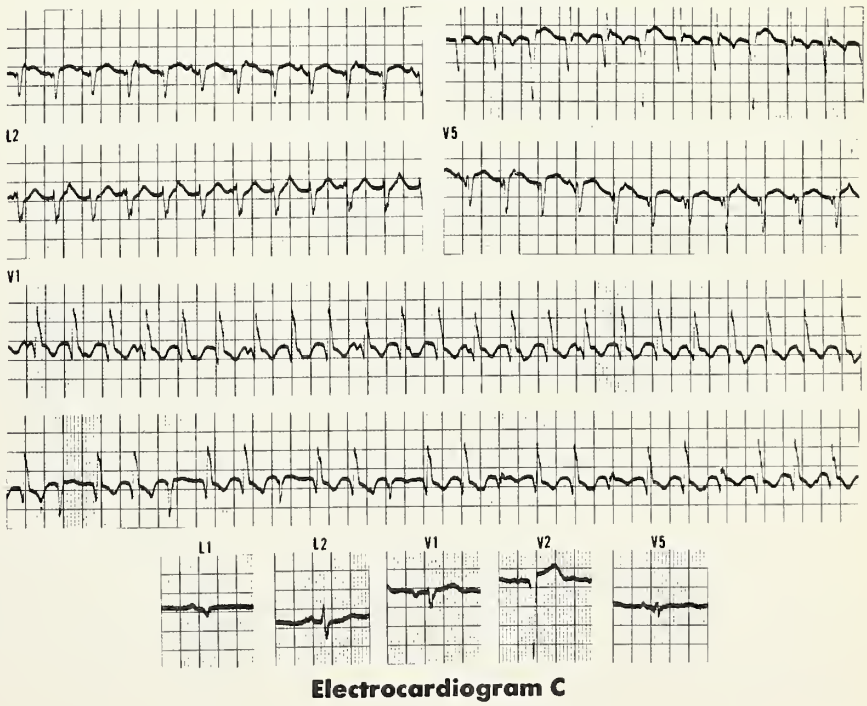
Consider Lead V_1 in *Electro-rdiogram B*. The second and venth complexes are more nar-w and normal than the broad mplexes; they are slightly prema-re, and they are preceded by p-aves. These complexes represent ntricular "capture" by the supra-entricular p-wave. Since the com-lex is less aberrant, yet more pre-nature, the broad complexes origi-ate in the ventricle, i.e., VT. Hav-g identified these p-waves, atrial ctivity can be identified at a rate f 120/min, dissociated from the T at 148/min.

Other captures include the third nd ninth complex in Lead V_2; the ourth complex in Lead V_6; and he ninth complex in Lead aVF.

Electrocardiogram C is quite informative. Study the fourth line (Lead V_1), to note two broad QRS complexes followed by one narrow complex. The narrow complex is the normal configuration for V_1 (note pattern in sinus rhythm below), and each is preceded by p-waves. Measure through the p-waves at rate of 100/min to prove dissociation from the broad complexes at rate of 150/min. The broad complexes are VT; the narrow complexes are captures from the supraventricular p-wave. Because of the fortuitous ratio of atrial to ventricular rate (100/150), every third complex is "captured." The captures to the right of the tracing are intermediate in configuration between the captures on the left and the ventricular complex; these are fusion complexes, i.e., part of the ventricle is depolarized from the p-wave and part from the VT focus. Fusions absolutely prove the tachycardia to be ventricular.



Electrocardiogram B



Electrocardiogram C



Isn't it about time to return stability and profitability to your investments?

You can have both, you know. If you put the people in our Personal Trust Group to work for you. Professionals like Gary Brown. Gary believes in a partnership approach to money management. First, he works with you to determine your needs and goals. Then, he presents an individualized program designed to increase the return on your investments and to minimize market volatility. And he maintains a follow-up dialogue with you to keep your program consistent with your needs and goals and with changing market conditions.

Gary backs up his recommendations with the same expertise that has won our Asset Management Group nationwide recognition for consistent asset management performance.

All your life you've worked to build your net worth. Let a professional help make the most of it. Put Gary Brown to work for you. Give him a call at 639-8192.

Personal asset management. It's another way we're proving we want to be your bank.



Personal Trust Group

AMERICAN FLETCHER NATIONAL BANK AFNB

Congenital Absence of the Right Pericardium: A Rare Cause of Clinical Confusion

Although rare, congenital pericardial defects are being recognized more often. Controversy exists concerning the best operation if surgery is performed . . .

HARRY SIDERYS, M.D.
WILLIAM D. BOWERS, M.D.
RICHARD SCHUMACHER, M.D.
Indianapolis

CONGENITAL DEFECTS of the pericardium, either partial or complete, are a rare form of heart disease. Although they are frequently associated with other congenital anomalies, they occasionally occur singly and produce symptoms that require attention in otherwise healthy individuals.

From the Department of Medical Research, Methodist Hospital of Indiana, Inc., 1604 N. Capitol Ave., Indianapolis 46202.

This project was partially financed by a grant from the Showalter Fund, Methodist Hospital of Indiana, Inc.

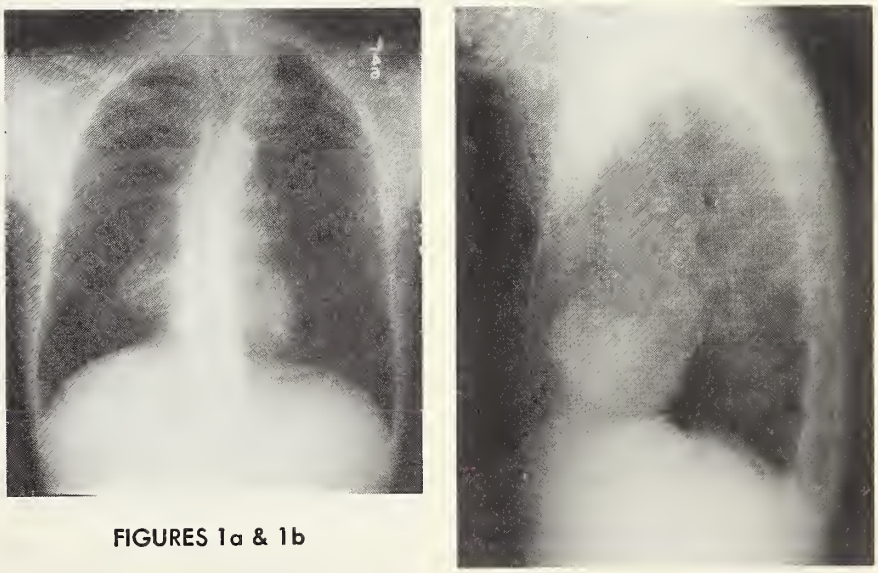
Acknowledgement: The authors wish to thank Paul S. Strange, M.D., for the referral of this patient.

CASE REPORT

The patient is a 15-year-old white male who was admitted to the hospital with an abnormal chest x-ray *(Figures 1a & 1b)*. The x-ray was part of a pre-operative work-up, at another hospital, in preparation for an inguinal hernia repair.

History revealed that the patient had precordial pain on exertion, which radiated through to his back. He was particularly aware of this in the two years prior to admission. Approximately one week before admission, the patient had a syncopal episode and fell to the floor. There was no explanation for this and it was of momentary duration. Two days later he had a near-syncopal episode, again without explanation.

Past history revealed that he had a right orchiopexy two years prior



FIGURES 1a & 1b

P.A. and right lateral x-ray test reveal a large right para-cardiac mass.

to admission, but with this exception had enjoyed good health.

Physical examination was normal except for scoliosis of the upper thoracic spine and an indirect inguinal hernia. The patient developed right chest pain when he reached stage IV of a treadmill exam. His chest x-ray revealed a large solid mass in the right paracardiac border and an upper dorsal scoliosis CAT scan *(Figures 2a & 2b)* suggested the mass was part of the heart *(Figures 1a & 1b)*. Cardiac fluoroscopy revealed intrinsic pulsations in this mass. Cardiac catheterization identified the mass as right atrium *(Figures 3a & 3b)*. There were no other cardiac anomalies.

The patient was taken to surgery and explored through a median sternotomy. There was almost total absence of the right pericardium, and the right heart and particularly the right atrium was bulging into the pleural space. The right heart was relocated in a more anatomic position and the defect in the pericardium was closed with marlex mesh. His post operative course was uneventful. When seen three months later he was totally asymptomatic and his chest x-ray was normal.

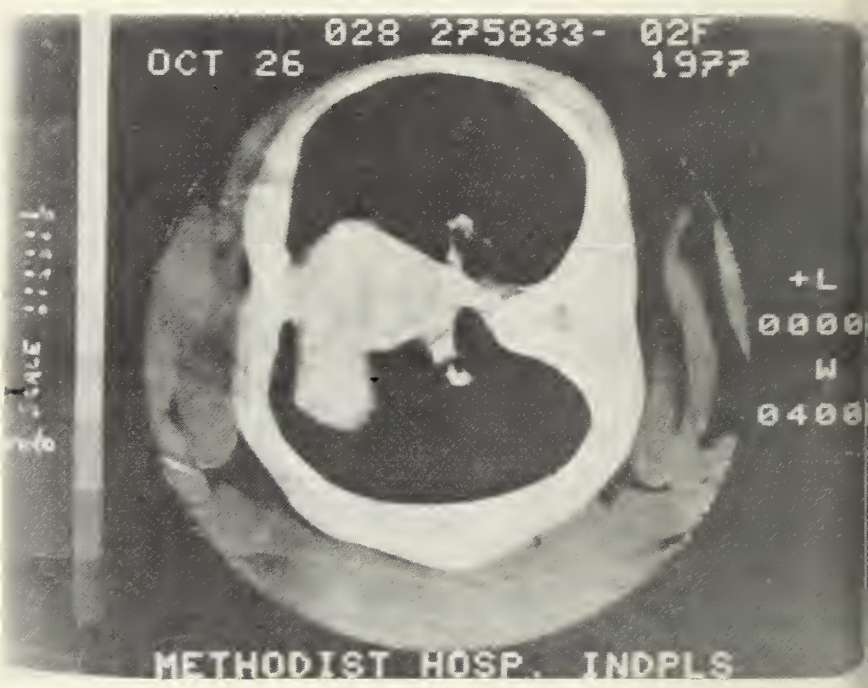
DISCUSSION

Although congenital pericardial defects are a rare anomaly they are being recognized with increasing frequency. They are frequently asymptomatic although precordial pain, arrhythmias, and syncope have been reported.

The great majority of these defects are on the left side with only 3% of patients having right sided defects. Some defects are small and allow herniation of only the left atrium while large defects are more common (which could allow herniation of the left ventricle).

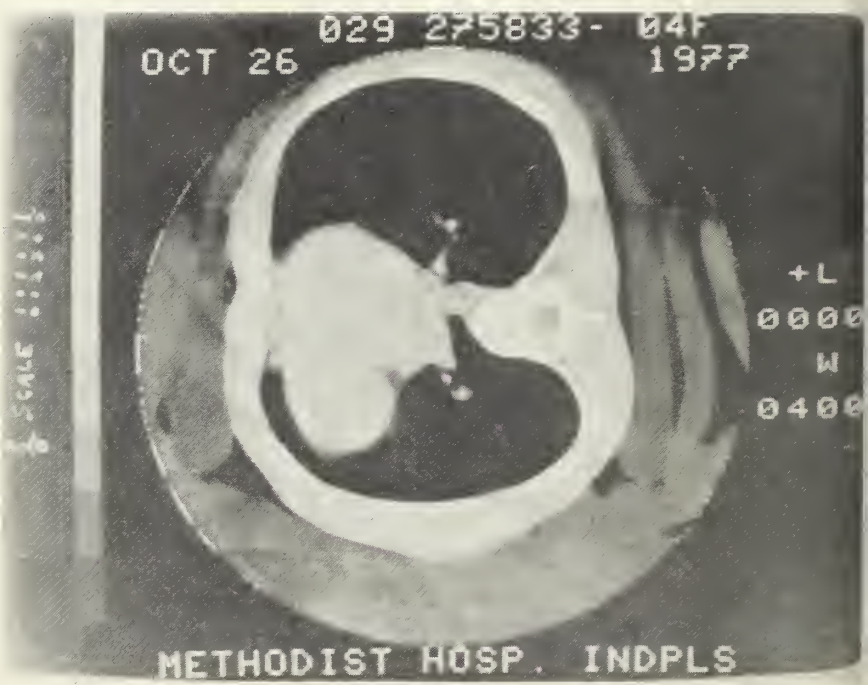
Most authors agree that surgery is indicated in symptomatic patients but this is not universally practiced.[1]

Controversy exists concerning the best operation if surgery is performed. Some feel that enlargement of a small defect protects against strangulation[2] while others feel that



FIGURES 2a & 2b

C.A.T. scan with the patient lying on his right side revealed the large pericardial mass confluent with the cardiac shadow.



pair of defects is more reasonle.[3] The fact that the three deaths e could find in the literature[4,5,6] had large pericardial defects gues against the virtue of large ricardial defects (or enlarging nall pericardial defects). On the her hand, there has never been a death related to complete absence of the left pericardium even though complete unilateral absence of the pericardium is more common than a subtotal defect.

Large defects are potentially dangerous but they can be treated by totally removing the pericardium on that side. Moore and Shumacker[7] have made the point that the pericardium is not necessary for cardiac function and that total unilateral absence of the pericardium has never been a cause of death. On the other hand, total unilateral absence of the pericardium can be associated with chest pain and probably other cardiac symptoms.[2,8]

In view of this we have taken the position that symptomatic pericardial defects should be repaired by patch closure of the defect.





FIGURES 3a & 3b

oot films of the chest show the cardiac catheter entering this mass, and jection of contrast material shows it to be the right atrium.

CONCLUSION

A young male with a large partial defect of the right pericardium, associated with chest pain and syncope, is presented. The defect was repaired with a marlex patch. The indications for, and methods of surgical treatment are discussed.

REFERENCES

1. Chang, CH, and Amory, HI: Congenital partial right pericardial defect associated with herniation of the right atrial appendage. *Radiology*, 84:660, 1965
2. Nasser, WK, Helman, C, Tavel, ME, Feigenbaum, H, Fisch, C: Congenital absence of the left pericardium. *Circulation*, 41:469, 1970
3. Fosburg, RG, Jakubiak, JV, Delaney, TB: Congenital partial absence of the pericardium. *Ann. Thorac. Surg.*, 5:171, 1968
4. Boxall, R: Incomplete pericardial sac: Escape of heart into the left pleural cavity. *Trans. Obst. Soc. (London)*, 28:209, 1887
5. Sunderland, S, and Wright-Smith, RJ: Congenital pericardial defect. *Br. Heart J.*, 6:167, 1944
6. Bruning, EGH: Congenital defect of the pericardium. *J. Clin. Path.*, 15: 133, 1962
7. Moore, TC, and Shumacker, HB, Jr: Congenital and experimentally produced pericardial defects. *Angiology*, 4:1-11, February 1953
8. Ellis, K, Leeds, NE, Himmelstein, A: Congenital deficiencies in partial pericardium. *Amer. J. Roentgen*, 82:125, 1959

A CASE REPORT

Soft Tissue Chondrosarcoma of the Hand

RAYMOND O. PIERCE, JR., M.D.
Indianapolis

SOFT TISSUE chondrosarcomas are not common lesions. They are prone to have recurrences and have been known to metastasize. The clinical diagnosis is rarely made so inadequate surgical excision or biopsy may be done. When one is dealing with a soft tissue mass which has calcification within it, soft tissue chondrosarcoma should be considered. This is a case report of this rather rare lesion in the hand.



FIGURE 1
X-rays show soft tissue mass with calcification.

The author is an associate professor, orthopedic surgery, Wishard Memorial Hospital, Indiana University Medical Center, 1001 W. 10th St., Indianapolis 46202.

CASE REPORT

A 38-year-old black male was admitted to Wishard Memorial Hospital with a nodule on the lateral aspect of his left hand. This had been present for two years and had slightly increased in size. He had difficulty with his hand only if he bumped it.

On examination a 1 1/2 cm firm mass was present over the dorsal lateral side of the 5th metacarpal. The mass was freely movable and did not appear to be fixed. An x-ray of the hand (*Figure 1*) showed a soft tissue mass with calcification. The x-ray interpretation was a tendon sheath hemangioma or synovioma. The clinical impression was a giant cell tumor of tendon sheath.

In surgery a lazy S type incision was made over the extensor surface of the 5th metacarpal. The incision was extended down to the mass. The mass appeared to be well encapsulated and was dissected from the surrounding soft tissue by sharp and blunt dissection. There did not appear to be any direct connection with bone or tendon sheath.

On gross examination the mass was found to be ivory white, irregular and ovoid and measured 2.5 cm × 1.7 cm × 1.0 cm on cut section. It consisted of white hyaline cartilage. Microscopic (*Figure 2*) examination showed that this was a cartilageous stroma. The chrondroid cells were binucleated and multinucleated. The individual nuclei revealed variability in size, shape and staining. The pathological diagnosis was well differentiated chondrosarcoma. Dr. Edwin E. Pontius of Methodist Hospital, Indianapolis, reviewed the slides and agreed with the diagnosis.

The wound healed per primam. He had no problems postoperatively. When last seen he had no evidence of recurrence.



FIGURE 2
Microscopic examination showing cartilageous stroma with evidence of malignancy.

COMMENTS

Soft tissue chondrosarcoma of the hand is a rather rare lesion. Goldenberg gave Paget credit for first describing cartilage tumors in soft tissue in 1870.[1] Stout differentiated the different types of soft tissue cartilage tumors that could occur. He pointed out that chondrosarcoma of the tendon sheath and extraarticular tissue could occur in the hand and in the feet. Stout reported seven cases of soft tissue chondrosarcoma and one of these occurred in the hand.[2] Goldenberg reviewed the literature and could only find 19 cases; to this he added seven others.[1] Of these cases two were found in the hand. This case possibly represents the fourth such case ever reported in the literature.

In all of the reported cases the diagnosis was not made clinically. Of those cases reviewed in the literature, the signs and symptoms depended upon the size and location. The most common complaints were pain and an enlarging mass. When one is dealing with a soft tissue tumor with calcification, this lesion should be kept in mind. Recurrences have been reported from two months to as late as 15 years. As this paper was written, our patient was about 30 months postoperative and was still under observation.

REFERENCES

1. Goldenberg, PR, Cohen, P, Steinlaus, P: Chondrosarcoma of the extraskeletal soft tissue. *J Bone Joint Surg (Am)*, 49: 1487-1506, 1967.
2. Stout, AP, Edward, D: Chondrosarcoma of soft tissues. *Cancer*, 5: 581, 1953.

Hypnotherapy in the Management of Terminally Ill Cancer Patients

HANUS J. GROSZ, M.D.
Indianapolis

For the dying cancer patient, pain isn't the only problem—attitudes and emotions also must be treated. Hypnosis may be of help . . .

THE LITERATURE on the uses of hypnosis in the management of patients dying of cancer focuses mainly on its application to the control of pain.[1] Relatively little is devoted to its use to improve the quality of life in the final stages of the illness. This is not surprising inasmuch as pain has been the principal target symptom of hypnotherapy since the days of Mesmer and inasmuch as pain is undoubtedly the most obtrusive and distressing complaint of cancer patients.

On the other hand, the medical profession and the lay public now view the management of the dying cancer patient from a broader perspective.[2] It is recognized that the care of a terminally ill and dying patient entails attention to a great and diverse number of needs and that these needs extend beyond the mere relief of physical pain and discomfort or the mere maintenance or prolongation of normal physiological function. They include the patient's psychological pain and distress, his attitudes toward suffering a fatal illness and his emotional responses to facing death and dying. And here, too, hypnosis can play a useful role.

In the present paper, the fourth in our series on the medical uses of hypnosis,[3,4,5] we touch upon some of the hypnotherapeutic techniques that may be of help in the total management of dying cancer patients. Two patients whom we recently treated shortly before their deaths will serve as examples. One was seen six times, the other once. In both instances the hypnotherapy aimed to improve the quality of their remaining life. It is of interest that it incidentally also improved the quality of life of the surviving relative.

CASE 1:
Fear of Death, Denial, and Displacement of Anxiety

Elizabeth came to see me to stop smoking cigarettes with the help of hypnosis. She had not been able to achieve abstinence on her own. She was 48 years old, happily married, and the mother of three children.

From the Department of Psychiatry, Institute of Psychiatry Research, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis 46223.

ıe was greatly concerned about ɛr health and felt that smoking im-ıired her chance of a healthy life. The hope she placed in the bene-ts of abstinence from smoking was ınrealistic. Three years earlier she ad undergone a modified radical ıastectomy for cancer. Soon malig-ant lumps were found in the chest all. Oophorectomy produced no elief. Malignancies invaded the ones and she was started on multi-rug chemotherapy.

When first seen, she had been eceiving chemotherapy for three ıonths. She was an attractive, in-elligent, perceptive, and serious-ninded woman, strongly devoted to er family. She had a good intellect-al grasp of the facts concerning her ancer but effectively used denial to nsulate herself from its prognostic mplications. Despite all evidence to he contrary, she tenaciously clung o the belief that abstinence from moking would decisively turn the ide of events in her favor.

Two weeks after the hypnotherapy or nicotine addiction she reported: 'I did fine until this past weekend. The chemotherapy made me so sick I could not do anything. I decided I would not go on with it. Sunday, I found myself smoking. It was not a conscious thing." She decided to ter-minate the chemotherapy because 'it's not worth the misery of the treatment." Again, she turned to the importance of not smoking: "You can't enjoy life if you are a prisoner of the cigarettes." Her deliberate preoccupation with kicking her smoking habit was an obvious at-tempt to displace from her aware-ness the threat of the advancing can-cer and the futility of all treatment efforts to arrest the disease. She sounded determined, cheerful, and optimistic, and we honored her re-quest for a second hypnotherapy for smoking.

When the patient returned, over two years later, she was receiving radio-therapy and medication for cancer. Her displacement of anxiety was beginning to lose its effective-ness. She was not smoking and had not smoked since her last office visit. But she had been to Juarez, Mexico, for three weeks of Laetrile treatment and had started what she called "my own program of revitaliz-ing my health with vitamins, health foods, and moderate Laetrile in-take." Her main complaints now were the increasing nausea and gagging—unresponsive to medica-tion—and the increasing stiffness and pains in her hips, chest, and back caused by the metastases in the bones. Attempts to control the pains with nerve blocks proved unsuccess-ful. She said she was experiencing "overwhelming lassitude, nausea, fatigue, weakness and decreased mobility."

She listed her symptoms and then quietly came to the point: "We have been very open about the whole thing. Last month I sunk. I couldn't go on. My doctor thought I did not have more than six months to live. Tests showed that the cancer had overcome the whole system. It took the starch out of me. I was even further depressed when my husband hired a practical nurse to help around the house. It was a symbol that I was not able to do for my-self." She straightened up. "I sure would like to prove them all wrong. I am not ready to give up. I have heard that there are ways of using the mind to overcome certain types of cancer. I have been arrogant about this disease. Other people die of this disease, but not me. It is not going to get me." She sighed and added reflectively: "I don't know how to face death gracefully." At her request the hypnotherapy was focused on the relief of her physical symptoms.

The following week she came to the session with her husband. She appeared to be much worse. The hypnotherapy helped with the nausea and she was able to eat a little but she felt terribly weakened. "It makes me depressed not having the strength. I have not been getting dressed in the morning. I have been staying in bed. I have not had the energy or interest to get up."

We induced a hypnotic trance and under hypnosis she attributed much of her continuing nausea to the fact that "my stomach feels all churned up." This she associated with a feel-ing of tension due to "the fear of being sick and dying." She feared "not being able to do anything for myself." She asserted that she was a very independent person. She said she was used to taking care of others, not to being taken care of. We assured her that it was all right at times to take from others and to be taken care of by others. She said resentfully "not till I am older" and then started to cry: "Why did it have to happen to me? I am losing and I don't like losing—not this kind of an unfair battle." When we confronted her with her feelings of anger, she acknowledged: "Yes, I feel angry, an utter disbelief that I am not going to win this battle. I have tried all my life to be well. I want to participate." We reflected how very hard and painful it was for her to accept the situation. She responded firmly: "I am not ready to die. I don't even want to be sick. My family is so much fun and I am missing it."

As her anxiety and depression mounted, she wondered if her hus-band was there. He reached for her hand and held it. "I need his help," she said. "I am scared to death. I don't want to leave them." She was still quite tense when we switched to a fantasy of death as a journey and as a temporary separation. She relaxed. We assured her that she was still giving of herself to her family now by allowing her family to help her. Her husband was now

asked to participate actively in the session. With the patient remaining in the hypnotic state, he reiterated and paraphrased the theme: "It's a gift on your part to accept our help. Dying is a short separation in time, a leave-taking. It's a transition time. We all can't die at the same time. We will all have to face this inevitable separation. It makes it a little less frightening knowing the times we still have together and the time we can all look forward to when we will all be together again." When she was brought out of the hypnotic state she looked relieved of her tension. She said she felt "very rested."

The following week she said that she was better "from the point of view of relaxation. I find that tension can bring up nausea. The last bout was when my daughter called and dumped all her anxiety on me." She reported that her doctor had just told her that tests showed a tumor in the liver. "I did not fall to pieces," she commented, "I kind of shrugged my shoulders. I felt this is just part of what is happening to me." Her husband was about to go abroad on a brief business trip and this, too, she accepted matter of factly: "I don't think I am going to die while he is away." She added, "I really have been very relaxed since our last session. Sometimes I unnerve my friends by my calm and casual approach." She was looking forward to the arrival of visiting relatives: "It is nicer that they come now than coming to my funeral."

The following three weeks she remained calm even though she gradually became weaker and more helpless. By the end of the third week she rapidly passed into a coma. She was admitted to a hospital where she died two days later.

CASE 2:
Depression and the Wish to Die:

Carol was referred to me because she was severely depressed. Her medication hardly controlled her pain and she was once again on the verge of suicide.

Three years before her visit to my office, Carol, then 27, a bright teacher and the mother of two children, developed a mass at the base of her tongue which failed to respond to antibiotics. The lesion continued to grow and to invade adjacent tissues, blood vessels, and lymph nodes. Biopsy established that she was suffering from a papillary epidermoid carcinoma. About a year before her office visit, she underwent cobalt-60 radiotherapy and radical operative procedures, including pharyngectomy, total glossectomy, total laryngectomy, hemimandibulectomy, and resection of skin reconstructed with bilateral deltopectoral flaps.

After her radical operation she made an attempt at suicide. She wrote to her doctor: "I realize you'll be upset when you learn about my depression. I don't want any more speeches about 'life at any cost.' Life *is* important but the quality accounts for more than quantity. Why was I offered only two choices: a slow painful death or a disfiguring operation? Why can't a peaceful death with some amount of dignity also be a choice? If I had realized what I would look like, I would *never, never* have had the operation. I feel imprisoned in a foreign, hideous body. It make me nauseous. Don't impose your value system on me. Being like this isn't worth living."

She came to my office with her husband. He was solicitous, attentive to her needs, and supported her as she walked: a thin, emaciated, frail body of skin and bones with a grossly disfigured face, head, and neck. The cancer had invaded her chin and blood vessel walls and she was admitted to the hospital for recurrent hemorrhages. She was in much pain and was requesting injections of Demerol® and morphine every two hours.

Because of her laryngectomy and total removal of the tongue, Carol could only communicate by sign language, through her husband, or in writing.

"I want to die," she wrote. "I have been in pain for almost three years. I can't teach any longer. I can't talk, eat, or smell. I feel like a deformed freak. I embarass my children and my family. I look forward to death. Monday night I was anxious for it to be over. I never know what to expect, only that the future will probably be worse. I feel cheated—not that fairness is a law of the universe, but I have been through enough for one lifetime. Being alive feels like punishment. I want to die."

Carol was hypnotized in the presence of her husband. She readily established a light hypnotic trance but attempts to deepen it and to induce anesthesia to pain were unsuccessful. She felt frightened. On being brought out of the hypnotic trance she reported that, although her body became more relaxed, the pain actually increased. She requested that I help her "accept my fate, speechlessness and deformity."

When Carol was re-hypnotized, the thrust of the hypnotherapy was changed. The symptomatic treatment of pain was abandoned and the therapy was directed at relieving her despair. To help her escape from the stark reality of the present, we fostered the vivid production of fantasies that recaptured and relieved the memories of more joyful moments of the past. Carol was a small town girl and loved the outdoors. With the help of hypnosis she easily regressed to times that she had spent out in the country, walking through the woods or wading

rough a stream. Her husband was rought into the session as an ac-ve participant. He was a store-ouse of joyful experiences that ey had shared and he fed her his vn vivid recollections of their hap-er days together.

When Carol was brought out of e hypnotic state she was at much reater ease. She wrote, "That felt eautiful. It was peaceful, pleasura-e, sensual. All the warm feeling love, fun, contentment and peace ere there. I actually *smelled* some-ing, and I laughed out loud in my ind." Before the session was rminated, Carol's husband, with s wife's consent, was taught how induce a hypnotic state in her id how to foster hypnotically in-uced fantasies.

I did not see Carol again. She ed three days later of uncontrolla-e hemorrhage. The nurse who had bserved her and who had taken are of her wrote to me: "I took are of Carol the last week and eekend before her death. During e week she was at times very agi-ted and restless and alternatively ery lethargic. She was requesting ain medicine nearly every 2 to 3 ours, sometimes more often. She as frequently upset over small ings. During the last weekend she as much calmer. She communi-ated desires more slowly and pa-ently. She was averaging 5 hours etween shots . . . her husband ayed with her nearly continuously. ne periodically experienced active leeding. During those times her usband sat close to her and talked ery slowly and calmly to her. I id not know she was being hyp-otized but, looking back, I feel it elped her remain calm and in less ain that last weekend. More im-ortantly, I think it helped her hus-and by giving him some way to elp her."

After Carol's death, her husband old me that hypnosis "was very effective, to say the least. It helped her immensely. But it also helped the survivor because there is nothing you can do otherwise. With this technique it helped me to see her gain relief. And it provided Carol with some happiness." Her funeral was as she had planned it: a celebration, and an acceptance.

DISCUSSION

Hypnotherapy is a form of psychotherapy and as such should be applied as an integral part of the physician's relationship with the patient. The preservation of hypnotherapy as part of the doctor-patient relationship is particularly important in the treatment of the terminally ill and dying patient. When all else has failed it may be the only remaining resource of professional aid and comfort.

Although we have chosen patients who were treated only in the final days of their illness, hypnotherapy has much to offer in the management of patients in all stages of malignant disease. Its use need not be restricted only to the treatment of terminally ill and dying adults. It can be applied equally well in the treatment of dying children.[6]

The principal advantage of hypnosis is that it offers a ready and speedy access to the patient's mind. Skillfully and selectively used, it is both a diagnostic and a therapeutic tool. Naturally, it requires an understanding of psychopathology and psychodynamics to apply it in analytically oriented psychotherapy, but this is not required in the treatment with hypnosis of such specific symptoms as pain, insomnia, nausea, or vomiting.

Hypnosis facilitates the reduction of anxiety and tension and thus allows the patient to express more freely his inner concerns. While this can be of enormous benefit to the patient, a forced, ill-timed or inappropriate ventilation of anxiety can also inadvertently strip the patient of his psychological defenses against the sources of his fears. The result may be an even deeper state of anxiety, depression and despair. For this reason, uncovering techniques are best left to physicians trained and skilled in their use. In general, hypnosis to alleviate a specific physical symptom is free of this hazard unless the symptom is clearly a symbolic expression of, or defense against, some underlying emotional conflict.

It says much for the versatility of hypnosis as an instrument of treatment when a patient can be taught how to achieve self-mastery through self-hypnosis and the patient's relatives can be quickly trained to apply it to the patient. As we have seen, the latter use of hypnosis can be of help not only to the patient but also to the patient's relative who is apt to feel frustrated and helpless. By providing an opportunity for the relative to alleviate the patient's suffering, we can relieve some of the relative's own feelings of anxiety, depression and guilt.

REFERENCES

1. Butler, B: The use of hypnosis in the care of the cancer patient. *Cancer,* 7:1-14, 1956.
2. Kuebler-Ross, C: *On Death and Dying,* New York: Macmillan, 1969.
3. Grosz, HJ: Nicotine addiction: Treatment with medical hypnosis, Part 1. *The Journal of the Indiana State Medical Association,* 71:1074-1075, November 1978.
4. Grosz, HJ: Nicotine addiction: Treatment with medical hypnosis, Part 2. *The Journal of the Indiana State Medical Association,* 71:1136-1137, December 1978.
5. Grosz, HJ: Nicotine addiction: Treatment with medical hypnosis, Part 3. *The Journal of the Indiana State Medical Association,* 72:43-45, January 1979.
6. Gardner, GG: Childhood death and human dignity: Hypnotherapy for David. *Internat. J. Clin. Exp. Hypnosis,* 24:122-139, 1976.

FUTURE FILE

Indiana University CME Courses

March 7-8: Current Topics in Internal Medicine;
March 28-29: Pediatric Pulmonary Conference;
April 1-3: Family Practice Review—Part 1;
April 2-4: Cross-Sectional Echocardiography Workshop;
April 18: Arthur B. Richter Child Psychiatry Conference;
April 18-19: Pharmacology Review (Richmond);
April 25: Dermatology for the Primary Care Physician;
May 2-4: Gastrointestinal Radiology;
May 9-10: Electrocardiography;
May 22-24: Family Practice Review—Part 2;

For information, write or call the Indiana University School of Medicine, Division of Postgraduate Medical Education, 1100 W. Michigan St., Indianapolis 46202. Tel: (317) 264-8353.

Detroit Course Announced

A CME course entitled, "Medical and Surgical Problems in Infants, Children and Adolescents," will be conducted April 6-7 at Henry Ford Hospital, Detroit, Mich. Designed for pediatricians, primary care physicians, general surgeons and pediatric surgeons, the course fee will be $150 for physicians. Fifteen Category 1 credit hours will be awarded for completion.

Contact Office of Medical Education, Henry Ford Hospital, 2799 W. Grand Blvd., Detroit, Mich. 48202. Tel: (313) 876-1464.

ISMA Calendar of Events

The following meetings, to be held at ISMA headquarters, have been announced:

Feb. 4—Commission on Medical Education
Feb. 4—Subcommission on Accreditation
Feb. 4—Commission on Medical Services

Mar. 4—Board of Trustees
Mar. 18—Commission on Public Relations

Apr. 4—Executive Committee
Apr. 23-25—Washington Visitation (Leadership)

May 6—Board of Trustees
May 16—I.U. Alumni Day
May 20—Commission on Medical Education
May 20—Subcommission on Accreditation
May 20—Commission on Public Relations

Michigan CME Offerings

April 2-27: Surgical Anatomical Review;
April 16-20: Family Practice Review;
April 24: Continuing Pathology;
May 8-9: Human Values in Health Care;
May 10-11: Ophthalmology;
May 14-18: Head and Neck Oncology;
May 21-25: Advances in Internal Medicine;
June 7-8: Blood Banking.

The above courses meet criteria for Category 1 credit. For details, contact the University of Michigan Medical School, Department of Postgraduate Medicine and Health Professions Education, The Towsley Center for Continuing Medical Education, Ann Arbor, Mich. 48109.

Child Care Conference

The Fourteenth Annual Indiana Multidisciplinary Child Care Conference will be held May 16-17 at the Marriott Inn, Indianapolis.

The speakers and their subjects include: Dr. William E. Bell—Pediatric Neurology; Drs. Paul DeRosa and Richard Lindseth—Pediatric Orthopedics, Parts I and II; Dr. Heinz Eichenwald—Pediatric Infectious Disease, Parts I and II; Drs. Arthur Norins and Nancy Esterle—Pediatric Dermatology; Drs. Morris Green, James Simmons and Ernest Smith—Behavioral Pediatrics, Parts I and II; Dr. Adele Hofmann—Adolescence, Parts I and II; Dr. William E. Lattanzi—Fluid and Electrolytes. The banquet speaker will be Dr. Albert J. Solnit—"Before and Beyond the Best Interests of the Child".

Further information may be obtained by writing to Dr. Morris Green, Department of Pediatrics, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis 46223.

Three Days in Vermont

The American College of Chest Physicians and the Lahey Clinic Foundation will sponsor the postgraduate course, "Clinical Cardiology—Fifth Annual Sugarbush Course," March 7-9 at the Sugarbush Inn, Warren, Vt. Director of the CME course is Sidney Alexander, M.D., chief of the cardiovascular section at the Lahey Clinic Foundation, Boston. The course is directed at the physician, cardiologist or internist who treats heart patients. The program has been accredited for 16 1/4 hours in Category 1 of the AMA Physician Recognition Award.

For information, contact Dale E. Braddy, MS, Director of Education, American College of Chest Physicians, 911 Busse Highway, Park Ridge, Ill. 60068.

lytomography of the Temporal Bone

The 20th two-day symposium on Polytomography of Temporal Bone will be conducted at Community spital in Indianapolis April 21-22 under the auspices The Wright Institute of Otology.

This CME activity meets the criteria for 12 credit urs of Category 1 of the AMA's Physician Recogni- n Award. Fee for the course is $250.

Subjects covered will be basic anatomy of the tem- al bone and technique of polytomography of the nporal bone, with demonstrations of normal tomo- ms. Pathological conditions revealed by polytomo- phy—cholesteatoma, ossicular chain problems, sclerosis, fractures, foreign bodies, tumors, con- ital anomalies—will be shown or original tomo- ms and the clinical applications will be discussed.

Direct inquiries to The Wright Institute of Otology, ., Community Hospital of Indianapolis, 1500 N. ter Ave., Indianapolis 46219, or call (317) 353-5679.

inical Neurology Course

"Contemporary Clinical Neurology" is the subject of postgraduate course to be held on Hilton Head Is- d, S.C., July 25 - 29. The program is to be presented the Department of Neurology, Vanderbilt University d is accredited for 16 hours, Category 1. For full par- ulars write Vanderbilt Continuing Education, 305 edical Arts Bldg., Nashville, Tenn. 37212.

east Cancer Conference

Breast Cancer will be the subject of the American ncer Society National Conference at the Waldorf- toria, New York City Sept. 6 - 8. Attendance is ited to physicians and medical students. Advance istration is requested. There is no registration fee. e meeting is approved for 16 credit hours in Cate- y 1. Write to Breast Cancer Conference, American ncer Society, 777 Third Ave., New York City 017.

inical Cardilogy Course

The American College of Chest Physicians and the hey Clinic Foundation will sponsor a postgraduate urse, "Clinical Cardiology—Fifth Annual Sugarbush urse," to be held at Sugarbush Inn, Warren, Ver- nt, March 7 to 9. Tuition for members is $165, for nmembers $185. The course is accredited for 16 1/4 urs in Category 1. Write to Dale E. Braddy, 811 sse Highway, Park Ridge, Ill. 60068.

Univ. of Kentucky CME Courses

March 23-24: Rheumatology Symposium;

April 2-3: Medical Aspects of Sports Symposium;

April 20-21: Endocrinology for the Practicing Physician;

April 25-27: Advances in the Therapeutics of Internal Medicine (American College of Physicians);

May 2-4: Controversies in OB-Gyn Care;

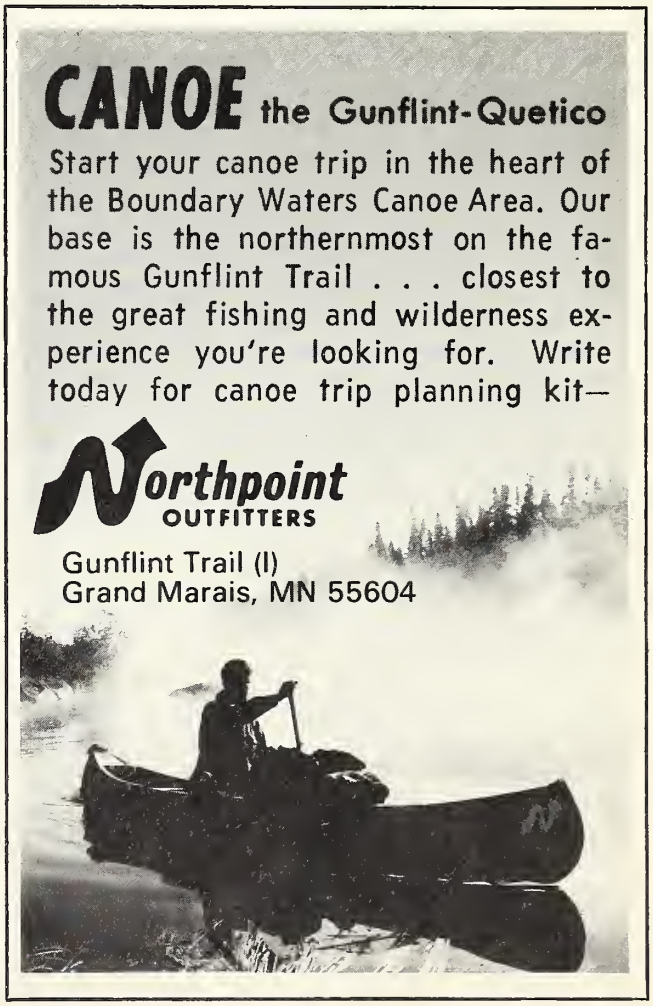
May 17-18: Psycho and Social Problems for the Practicing Pediatrician;

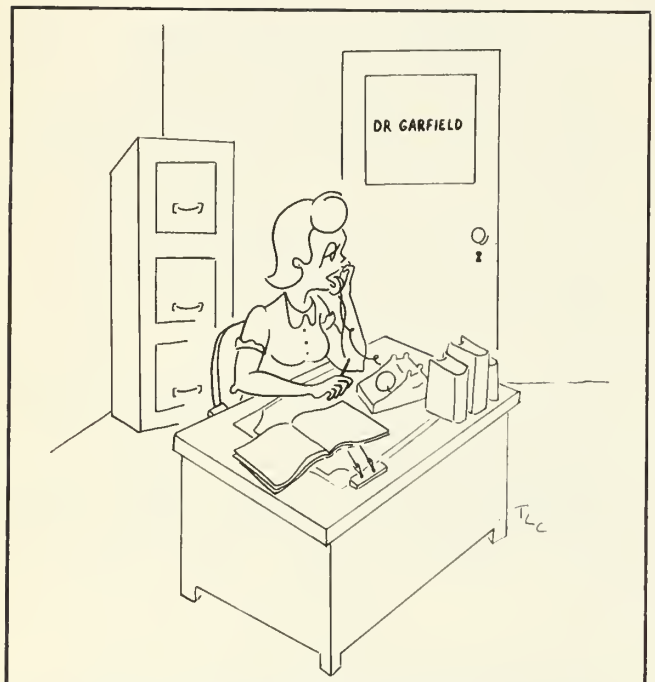
May 18-19: Fiberoptic Bronchoscopy: A Workshop, Session 3;

June 3-8: Tenth Family Medicine Review, Session 1;

June 24-29: Tenth Family Medicine Review, Session 2.

For further information, contact Frank R. Lemon, M.D., Continuing Education College of Medicine, University of Kentucky, Lexington 40536. Tel: (606) 233-5161.





GARFIELD--THAT'S G AS IN GASTROENTEROLOGY...
A AS IN ANESTHESIOLOGY...R AS IN....

An Attack on Professionalism

A Federal Trade Commission judge has ruled that the AMA, the Connecticut State Medical Society and the New Haven County Medical Association are guilty of restraining physician advertising and physician participation in certain health delivery systems.

The ruling states that the AMA will be "permitted" to set ethical guidelines for members "after first obtaining the permission and approval of the FTC."

Dr. Robert B. Hunter, AMA board chairman, called the ruling a "shocking and pervasive attack on professionalism, not just the medical profession but all professions."

If necessary, the AMA said it will appeal the ruling to the Supreme Court.

1979 Membership Roster

The annual ISMA membership roster will be pu lished next month as a supplement to the March iss of THE JOURNAL. Subscribers will automatically ceive a copy. Additional copies will be available a cost of $15 through the ISMA Membership Depa ment; copies will be sold to members for $5.

Boob Tube Exercises

If you're a television sports addict, it need not int fere with keeping yourself physicially fit, says I Michael Halberstam, a Washington cardiologist a editor of MODERN MEDICINE magazine. He sugge taking advantage of commercials to do your e ercising. "There are approximately 15 commerci during the average football game, for example, and th give you time for many pushups, knee bends a stomach exercises," he says.

Barton Professorship

Dr. Robert L. Campbell, director of the Section Neurological Surgery at Indiana University School Medicine, has been named the Betsey Barton Profess of Neurosurgery. The Barton professorship is one approximately 20 named and distinguished profess chairs at IUSM. It was established in 1967 when t Betsey A. Barton Fund for Neurological Research w created in the I. U. Foundation.

Voluntary Effort Studied

Funded by a $2 million grant from HEW's Heal Care Financing Administration, Northwestern Unive sity is conducting a five-year study of the voluntary e fort program. The program, designed by the Americ Hospital Association, the AMA and the Federation American Hospitals to reduce the rate of increase i hospital expenditures by 2% a year for the next tw years, is being evaluated as part of a major health ca cost containment study.

INDIANA MEDICAL BUREAU
1010 East 86th St.—72 Winterton
Indianapolis 46240
844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service

NEWS NOTES

iplomates

The following ISMA members have been named plomates of the organizations indicated:

American Board of Internal Medicine:
Dr. Harry L. Staley, Bluffton.

American Board of Family Practice:
Dr. Gordon C. Crates, Denver;
Dr. Philip C. Ferguson, Wabash;
Dr. Frederick R. Ridge, Indianapolis.

rthritis Pamphlet

"Arthritis: Everybody's Disease" is the title of the test Public Affairs Pamphlet #562. It is written by rthur S. Freese to describe for patients symptoms of ried forms of arthritis. He also explains what is own about causes and treatments. The 24-page mphlet is available for 50 cents per copy from Public ffairs Committee, 381 Park Ave., South, New York ty, 10016.

loney Transfer Machine

More than half the tax dollars collected by the federal government from individual taxpayers go out again federal payments to individuals and grants to state d local governments. Known as transfer payments, ese outlays will rise in 1979 to approximately $282 llion, or about 56% of budget outlays, according to e Tax Foundation.

lere and There . . .

. . .**Dr. Thomas F. Lavelle, Jr.** of South Bend has en named a Fellow of the American College of ysicians.

. . .**Dr. Charles M. Clark, Jr.** of Indianapolis has en elected president of the American Diabetes Asciation, Indiana Affiliate; **Dr. John H. Warvel, Jr.** as elected president-elect.

. . .**Dr. Robert W. Kohne** and **Dr. Eli Blair Harter** ve been re-appointed to four-year terms on the afayette Board of Health.

. . .**Dr. Frederic L. Schoen** of Indianapolis has been med chairman of the finance committee, American cademy of Family Physicians.

. . .**Dr. Robert E. Hannemann** of Lafayette has been ppointed to the Perinatal Section of the American cademy of Pediatrics.

. . .**Dr. Alvin J. Haley** of South Bend, chairman of e ISMA Board of Trustees, has been appointed chairan of the Warner/Chilcott Teacher Development wards Committee, American Academy of Family hysicians.



NEW PROSTHETIC METHODS OPEN NEW DOORS

New doors have been opened to amputees — thanks to new prosthetic techniques. During the past few years many recent prosthetic developments now offer improved function for the amputee, as well as better appearance and increased comfort.

SILASTIC SILICONE MATERIAL - Silastic is useful in forming distal-bearing or total-contact pads that apply form-fitted pressure on the distal end of stumps. The density of this material may be varied to suit the individual requirements of each amputee.

TOTAL CONTACT SOCKET - Developed by research, this new socket distributes weight bearing over the entire stump. It is particularly helpful in problem cases of poor circulation.

MOLDED SACH FOOT - This Solid-Ankle, Cushion-Heel foot is more durable and its one-piece construction is more pleasing in appearance.

MUENSTER FITTING - Better control with less harness is achieved in this new method of fitting very short—below elbow stumps. The unusual socket shape utilized provides a more intimate fit assuring a more functional prosthesis.

For information on these developments, please write to:

Hanger PROSTHESES

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807

NEWS NOTES

Dr. Paynter Resigning

Dr. William T. Paynter, state health commissioner, has announced that he will leave his post in June. He has been commissioner since 1973. Dr. Paynter formerly served as deputy mental health commissioner for about two years, and had been a staff psychiatrist and head of the psychiatry department at Wishard Memorial Hospital in Indianapolis for nine years.

Ritchey Professorship Fund

In observance of the I.U. School of Medicine's 75th anniversary, many Indiana University medical students are contributing to the school's James O. Ritchey Professorship Fund in honor of the man who has become known as the "dean of Indiana physicians."

Dr. Ritchey, now 88, taught hundreds of medical students over 55 years. He was chairman of the I.U. Department of Medicine for 25 years. Today Dr. Ritchey, Distinguished Professor Emeritus of Medicine at I.U., still serves as chairman of the School of Medicine's admissions committee.



YOU SET HIS LEG. I'M NOT GOING TO SET HIS LEG.

The Williams & Wilkins Co.

Baltimore, Maryland

We are proud to announce that George Hood is our new sales representative for Illinois, Indiana, and Wisconsin.



George W. Hood
15127 Las Flores Lane
Oak Forest, Il. 60452
(312) 687-9011

George is eager to supply you with books and journals from Williams & Wilkins as well as titles from Lea & Febiger and Little, Brown.

Please look for George's display in your hospital or call him at home for prompt service.

George will be happy to accept your Master Charge or VISA card for any Williams & Wilkins; Little, Brown; and Lea & Febiger title.

AMA's 1979 Budget

The AMA's 1979 budget is based on expected revenues of approximately $62.5 million and expected expenses of just under $55.6 million. The favorable balance will go into reserves in accordance with 1975 House of Delegates policy.

The House reference committee reported that, without a dramatic increase in membership, the AMA's expenses will exceed income by 1981 because of inflation.

Auxilians Get AM News

The ISMA has completed arrangements that will provide subscriptions to the AMERICAN MEDICAL NEWS, AMA's weekly newspaper, for presidents of county medical society auxiliaries. The action, coordinated through Mrs. G. Beach Gattman, president of the ISMA Auxiliary, and approved by the Executive Committee, is intended to provide key officers of the Auxiliary with up-to-date information concerning the activities of organized medicine.

No Charges Filed

G. D. Searle & Co. has announced that, after a lengthy investigation concerning the reporting of certain test data developed between 1970 and 1975, the U.S. Department of Justice has decided to end its investigation and not to seek criminal charges.

NEWS NOTES

ospital Elections

St. Vincent Hospital & Health Care Center, In-anapolis—Dr. Thomas E. Woerner, president; Dr. hn A. Crawford, vice-president and president-elect; r. Irving Cohen, secretary-treasurer.

Bloomington Hospital—Dr. Clarence R. McIntire, ief of staff; Dr. Timothy Habbe, chief of staff-elect; r. D. Dean Cofield, secretary; Dr. Charles W. Mc-ary, treasurer.

Parkview Memorial Hospital, Fort Wayne—Dr. illip C. Schubert, president; Dr. Charles Frank-user, president-elect; Dr. Joseph Richardson, secre-ry-treasurer.

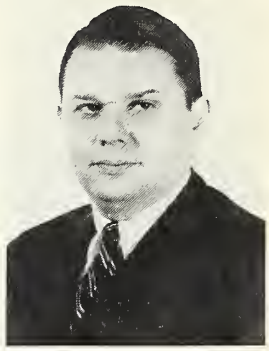
St. Joseph's Hospital, Fort Wayne—Dr. George anning, president; Dr. Linus Minick, president-elect; r. Peter Rothman, secretary-treasurer.

Bartholomew County Hospital, Columbus—Dr. Kir- Tarry, chief of staff; Dr. Michael Free, chief of staff-ect; Dr. Jack Scherer, secretary.

Terre Haute Regional Hospital—Dr. William Veach, esident; Dr. Manuel Cacdac, president-elect; Dr. enny Ko, secretary-treasurer.

LaPorte Hospital—Dr. Frank H. Zahrt, president; r. Joon S. Kim, vice-president; Dr. Charles F. agenow, secretary-treasurer.

Heads Kidney Foundation



Dr. Stuart A. Kleit of Indianapolis, Professor of Medicine and Chief of the Renal Section, Indiana University School of Medicine, has been elected President of the National Kidney Foundation.

Financing Fallacy

"The Health Service was launched on a fallacy," declares David Owen, M.D., Britain's foreign secretary and former Labor Party minister in charge of socialized medicine. "First we were going to finance everything and cure the nation, then spending would drop. That fallacy has been exposed. Then there was the period when everybody thought the public could have whatever they needed on the health service—it was just a question of governmental will. Now we recognize that no country, even if they are prepared to pay the taxes, can supply everything."



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS

Operated by PHYSICIANS

For the protection of PHYSICIANS

P&SLI

Physicians & Surgeons Liability Insurance Co., Inc.
800 Mac Arthur Boulevard / Munster, Indiana 46321
219 836-2288

PHYSICIANS' DIRECTORY

INTERNAL MEDICINE

Offices for the doctors listed below are located at 3130 N. Meridian St., Indianapolis 46208; the switchboard number is 317-927-1221.

MERIDIAN MEDICAL GROUP

CARDIOLOGY
Richard M. Nay, M.D.
Warren E. Coggeshall, M.D.
Richard R. Schumacher, M.D.
William C. Elliott, M.D.

HEMATOLOGY—ONCOLOGY
Laurence H. Bates, M.D.
William M. Dugan, M.D.
James E. Schroeder, M.D.
Frank A. Workman, M.D.
Deborah S. Provisor, M.D.
Pediatrics

METABOLISM AND ENDOCRINOLOGY
William M. Holland, M.D.

GASTROENTEROLOGY
Robert D. Pickett, M.D.
B. T. Maxam, M.D.
Lee G. Jordan, M.D.
Martin P. Meisenheimer, M.D.

INTERNAL MEDICINE
Hunter A. Soper, M.D.
Douglas H. White, Jr., M.D.
Michael B. DuBois, M.D.
Nephrology
Michael P. Bubb, M.D.
Robert L. Iverson, Jr., M.D.
Critical Care
Michael Zeckel, M.D.
Infectious Diseases

INFECTIOUS DISEASES
Thomas G. Slama, M.D.

NEUROLOGY
Norman W. Oestrike, M.D.
Charles Rehn, M.D.

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Ahearn, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegeman, M.D.
Douglas F. Johnstone, M.D.
LeRoy H. King, Jr., M.D., FACP

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capitol, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.

Neurological Surgery

1815 North Capitol Avenue Indianapolis 46202

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY

5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Training for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

HAND SURGERY

By appointment Phone 317-783-1319

VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.

Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery

3530 S. Keystone, Suite 305 Indianapolis 46227

PHYSICIANS' DIRECTORY

PSYCHIATRY

JOHN H. GREIST, M.D.

Diplomate, Baard of Neuralogy and Psychiatry

Specializing in Psychiatry

3231 Narth Meridian Street — Indianapalis 46208

GORDON T. BROWN, M.D.

Diplomate, Americon Baard of Psychiatry and Neurology

Adult and Adolescent

Psychatherapy, Consultation, Evoluation

Tel: (317) 923-3269

3266 North Meridion Street — Indianopolis 46208

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
PAUL M. FLANAGAN, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

ALLERGY

INDIANA ASTHMA & ALLERGY ASSOCIATES

Specializing in Chranic Severe Asthma

and

Adult and Pediatric Allergic Disarders

D. Duane Houser, M.D., Inc.
(317) 923-7650

and

Douglas J. Horton, M.D.
(317) 923-6990

1815 N. Capitol Avenue
Indianapolis, Indiana 46202

Diplomates, American Baard of Allergy & Immunalagy — Answering Service 926-3466

CARDIOLOGY

William K. Nasser, M.D. and Michael L. Smith, M.D. are pleased to announce the addition of Cass A. Pinkerton, M.D. for the practice of cardiology and cardiac catherization.

8402 Horcourt Road, Room 413
St. Vincent's Professional Building
Indianapolis — (317) 257-9316

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.

Certified: American Board af Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons

Specializing in Calan and Rectal Surgery

214 Sherland Building
105 East Jefferson Blvd. — Sauth Bend, Ind. 46601

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

MULTISPECIALTY PARTNERSHIP in northwest Indiana needs Surgeon, OB/Gyn, General Medicine. Send resume to Director, Janes Clinic, 110 Ridge Road, Munster, Ind. 46321.

FEMALE FAMILY PRACTITIONER. Primary office work, 3 or 4 days a week, regular hours in Greenfield, Ind. Please contact Dr. James Anderson at (317) 462-5642.

IMPORTANCE NOTICE: Will member who witnessed collision on Nov. 19, 1978 at 3 a.m. at the intersection of North and Illinois Streets, Indianapolis, involving a Yellow Cab and a 1978 Datsun please call collect Robert Spivey, (317) 636-5588. Member taken from scene of accident to Medical Tower.

MULTISPECIALTY 10-MAN GROUP—Staff expansion into new building. Seeking F.P., G.P., Int. Med., Ophth., Urol., Ped., ENT. March through December 1979. Guaranteed salary with early shareholding and income based on productivity. Excellent corporate benefits. Central Illinois/Indiana border location. Submit resume to J. J. Ott, Administrator, Danville Polyclinic, Ltd., 101-103 W. North, Danville, Illinois 61832.

FOR SALE: Estate wants to sell various medical equipment in good condition, including x-ray and diathermy. Inquire at (317) 846-2245 or (317) 639-5633.

MICHIGAN CITY, INDIANA—Emergency Department Director; flexible scheduling. Excellent income—$57,000 to $65,000. Paid malpractice insurance. Contact T.P. Cooper, M.D., 970 Executive Parkway, St. Louis, Missouri 63141, or call toll free 1-800-325-3982.

FULL TIME position as Emergency Room Physician in 365-bed hospital. $48,000 guaranteed minimum. Contact Ralph D. Weller, M.D., Emergency Department, or Mr. Duane R. Vorseth, Associate Administrator, Lafayette Home Hospital, Inc., 2400 South St., Lafayette, Ind. 47904. Tel: (317) 447-6811.

FOR RENT: 1500 square foot ground level condominium, beach, golf courses, swimming pools, clay tennis courts, accommodates six, two private baths. Hilton Head Island, S.C. $275 per week. Call (812) 275-2800.

FAMILY PRACTICE PHYSICIAN(S) WANTED—To take over excellent practice in southern Indiana from physician wishing to retire. Well located, beautiful clinic-type office building large enough for one or more physicians. Ample parking. Will assist in transition for one or two years if desired. W. E. Schoolfield, M.D., Orleans, Ind. 47452. Tel: (812) 865-3350 or 3351.

FAMILY PRACTITIONER OR INTERNIST full time for 60-bed comprehensive alcoholism treatment center with plans for expansion to 100+ beds and expanded outpatient services. Will work closely with and share coverage with three other full time physicians, and be responsible for initial medical evaluation, detoxification, treatment of medical problems and complications. Opportunity for involvement in teaching of medical students, residents, physicians and other health professionals. SALARY NEGOTIABLE ($50,000+) and excellent fringe benefits, including 4 weeks vacation, paid CME, paid health, disability and liability insurance. QUALIFICATIONS: M.D. with additional training and experience in Family Practice or Internal Medicine, sincere interest in treating alcoholics and Indiana Medical License, Board Certification and previous experience in Alcoholism Treatment preferred. CONTACT: Gerald P. Johnston, M.D., Medical Director, Fairbanks Hospital, Indianapolis, Ind. 46202. Tel: (317) 638-1574.

OPPORTUNITIES FOR PHYSICIANS—There are current openings among the Indiana State Hospitals at various locations throughout the State for psychiatrists and physicians of other specialties, at most experience levels. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, Ky. 42071 or call (collect) (502) 753-9772. Forrest is retained by the Indiana Department of Mental Health.

WANTED: Used exam tables, EKG machine, hyfercator, microscope, copier and other GP office equipment. Call or write HK R5 309 Baseline Rd., Evansville, Ind. 47711. Tel: (812) 867-6774.

Indiana Medical Foundation

The Indiana Medical Foundation was organized to furnish support for the educational activities of the Indiana State Medical Association. These activities include programs for continuing education and the scientific publications of **The Journal**. Contributions made to the foundation are deductible by donors in accordance with the Internal Revenue Code. Bequests, legacies and gifts are deductible for federal estate and gift tax purposes. Memorial contributions made to the foundation will be formally recorded and acknowledgment will be sent to the family. Gifts, bequests, and memorial contributions may be mailed to the foundation at 3935 N. Meridian St., Indianapolis 46208.

CME QUIZ

Hypoglycemia in the Diabetic

CONTINUED FROM PAGES 103-108

OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the rect answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana Univer- School of Medicine, Division of Postgraduate and Continuing Medical Education, 1100 W. Michigan St., In- napolis 46202.**

ISWER THE FOLLOWING QUESTIONS
JE OR FALSE:

1. Patients who have a history of reactive hypoglycemia are less likely to develop diabetes then the general population.
2. Insulin concentrations are rarely necessary or helpful in the diagnosis of reactive hypoglycemia.
3. The hypoglycemia which occurs in pituitary and adrenal insufficiency results from the increased insulin secretion seen in these conditions.
4. Extrapancreatic tumors rarely cause hypoglycemia by ectopic insulin secretion.
5. Hypoglycemia secondary to oral hypoglycemic agents usually occurs in patients who have been taking drugs for several weeks or longer.
6. Omission of 2 or more meals commonly precedes hypoglycemia secondary to oral agents.
7. The typical patient with hypoglycemia secondary to oral agents is elderly and has renal or hepatic disease.
8. The most frequent time of hypoglycemia in a juvenile diabetic on intermediate insulin is between 2 and 5 p.m.
9. In spite of all the possible causes of hypoglycemia in the insulin dependent diabetic, the most common causes are: increased exercise, decreased food intake, or errors in insulin dosages.
10. Hypoglycemia secondary to surreptitious self-administration of oral agents is extremely difficult to diagnose.
11. Spontaneous antibodies against endogenous insulin rarely occur.
12. Insulin secreting islet cell tumors secrete insulin and C-peptide in equal molar amounts.
13. Serum concentrations of oral hypoglycemic agents should be obtained on all patients with suspected islet cell tumors.
14. Glucogen has no place in the treatment of insulin induced hypoglycemia.
15. Hypoglycemia secondary to the oral agents usually is prolonged and has been known to last for several days.

e following are answers to the CME quiz that appeared the November 1978 issue of THE JOURNAL. The article on which the questions were based was "Practical Man- ement of Diabetes for Family Practitioners," by Charles M. rk, Jr., M.D.

a	7. a
b	8. e
e	9. d
a	10. c
b	11. c
d	

Complete this form to obtain verification for one hour of Category 1 AMA CME credit.

swer sheet for Quiz: (Hypoglycemia . . .)

1. T F	6. T F	11. T F
2. T F	7. T F	12. T F
3. T F	8. T F	13. T F
4. T F	9. T F	14. T F
5. T F	10. T F	15. T F

wish to apply for one hour of category 1 AMA ntinuing Medical Education credit through the I.U. hool of Medicine. I have read the article and an- ered the quiz on the answer sheet above. I under- nd that my answer sheet will be graded confidentially, no cost to me, and that notification of my successful mpletion of the quiz (80% of the questions answered rrectly) will be directed to me for my application for e Physician's Recognition Award of the American edical Association. I also understand that if I do not swer 80% of the questions correctly, I will not be lvised of my score but the answers will be published a later issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before April 15, 1979, to the address appearing at the top of this page.



"Efficiency is the key to your practice"
Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE
6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Immediate delivery on many 1979 models

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594

ADVERTISERS IN THIS ISSUE

February 1979 Vol. 72 No. 2

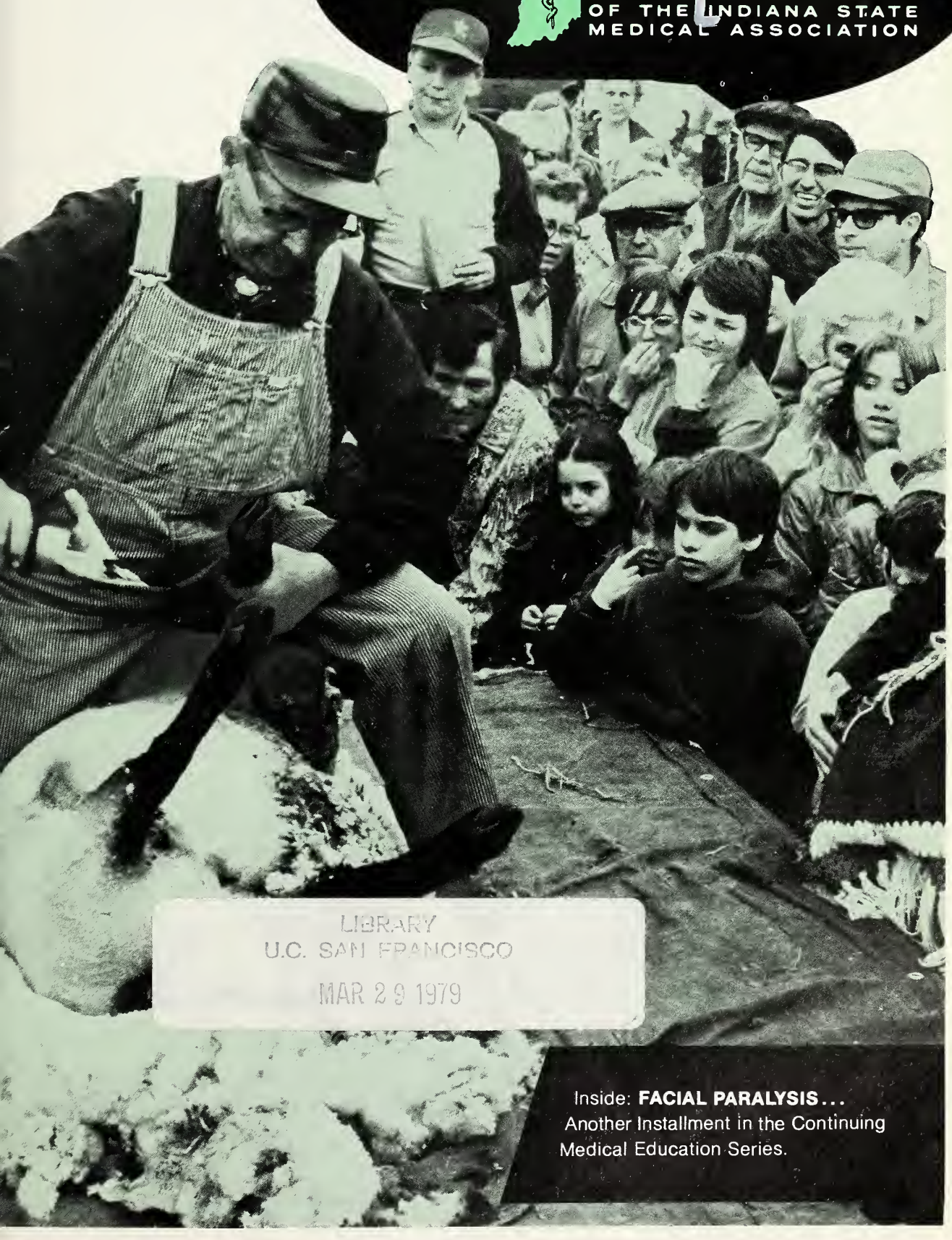
American Fletcher National Bank 120
Anacomp 75
Beltone Electronics Corp. 77
Blue Cross-Blue Shield 73
Brown Pharmaceutical Co., Inc. 109
Burroughs Wellcome Co. 102
Commercial Announcements 138
Hanger Protheses 133
Immke Circle Leasing, Inc. 140
Indiana Medical Bureau 132
Lilly, Eli and Company, Inc. 89
McClain Car Leasing, Inc. 93
Mead Johnson Pharmaceutical Division ..91, 92
Medical Protective Company 99
Merck Sharpe & Dohme 82
Merrell-National, Inc. 78, 79, 101, 112, 113, 114
Morris Plan 78
Northpoint Outfitters 131
P&SLI 135
Physicians' Directory 136, 137
Professional Careers Institute 140
Purepac Pharmaceutical Co. 87
Roche Laboratories Covers
Rockwood Insurance Company 97
Smith, Kline & French 111
Upjohn Company 80, 81, 82
Warner/Chilcott 85

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

March 1979 • Vol. 72 • No. 3

The JOURNAL

OF THE INDIANA STATE MEDICAL ASSOCIATION



LIBRARY
U.C. SAN FRANCISCO
MAR 29 1979

Inside: **FACIAL PARALYSIS...**
Another Installment in the Continuing Medical Education Series.



VALIUM®(diazepam)

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the indi-

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predispos-

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed, drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis

The Indiana Neuromuscular Research Laboratory



This issue of THE JOURNAL presents an article about muscular dystrophy tissue culture from the Indiana Neuromuscular Research Laboratory (See Page 184). This laboratory occupies space in the Old Pathology Building, and is the principle means of keeping the building occupied and used while preserving most of the building for museum purposes.

The laboratory is a tissue culture laboratory used exclusively for the study of normal and dystrophic skeletal muscle. The distinction between normal and dystrophic cells described in this article was discovered about 10 years ago, and has been used continuously since then as a tool for studying the chemistry of this interesting but fatal disease. The known metabolic pathways are being evaluated systemically. The disease is relatively rare and biopsy material is scarce. Progress is slow but promising.

This research project is funded by the Marion County Muscular Dystrophy Foundation, a United Way Agency.

The laboratory occupies space in the rear of the building that was used formerly as a storage area. It is away from the usual traffic pattern and does not interfere with the 19th century atmosphere of the building.

Ann Rudman (Mrs. Carl Rudman) and Janice Walker (Mrs. Gordon K. Walker), laboratory supervisor and assistant, respectively, together with Mr. John Humphrey, EEG technician, constitute the only work force in the building. They all serve the Museum in a number of ways, foremost of which is by conducting tours of the building.

The Museum has approximately 600 to 700 visitors per year. Except for this page of Notes, no effort is made to publicize the Museum. Visitors come from throughout the state throughout the year. Most are students in medical or para-medical fields, although Boy Scout and church groups are also included.

Tours are arranged on an appointment basis, so as to permit efficient scheduling of laboratory work.

Funding for the Museum comes entirely from volunteer $2 contributions of ISMA members at time of renewing annual dues, and from the ISMA Auxiliary. This amounts to approximately $2,500 per year. Of this, approximately $500 is spent for annual legal fees and insurance. The remainder is spent for restoration purposes. There are no paid employees.

Services of the above-mentioned persons, plus that of the Museum's part-time volunteer librarian, Mrs. Conner Jester, are gratis.

We are grateful for their interest and help, and take this means of publicly saying "thank you."

WHAT'S NEW?

Squibb is adding AMITID™ (amitriptyline hydrochloride) to its Squibb Pharmachoice line of high-quality generic products. AMITID is a prescription drug in the antidepressant category. Tablets for oral administration are available in 10, 25, 50, 75 and 100 mg formulation.

* * *

Ortho Pharmaceutical announces a new drug for treatment of severe systemic fungal infections. MONISTAT i.v.™ (miconazole for intravenous infusion) is indicated for treatment of candidiasis, cryptococcosis, paracoccidioidomycosis, chronic mucocutaneous candidiasis and coccidioidomycosis. Clinical trails have shown highly favorable rates of recovery or clinical improvement with no serious renal or hepatic toxicity.

* * *

Schering is introducing a new prescription product, Gyne-Lotrimin (clortrimazole) Vaginal Cream. It is indicated for topical treatment of vulvo-vaginal candidiasis (moniliasis).

* * *

Merck Sharp & Dohme has approval from the FDA to sell "Cuprimine" as an entity indicated in severe, active rheumatoid arthritis. Cuprimine (Penicillamine, MSD), is a synthetic relative of penicillin. It was introduced in 1963 for treatment of Wilson's Disease and was later approved for cystinuria. Severe side effects are not uncommon and patients should be carefully monitored. Cuprimine may offer an alternative in treating severe arthritis in patients who have been unresponsive to conventional therapy.

* * *

IN BOOKS . . .

Doubleday has released "In Defense of Ourselves/ A Rape Prevention Handbook for Women" by Linda Tschirhart Sanford and Ann Fetter. Avoidance, conduct during attack and self-defense are discussed. Ann Fetter, a black belt in karate, was a self-defense director, and is now a practicing attorney. Ms. Sanford was a director of the Rape Prevention Forum in Seattle. 177 pages—$5.95.

* * *

Grune & Stratton has published "The Influence of Litigation on Medical Practice." The book records the proceedings of a conference sponsored by the Royal Society of Medicine in May, 1977. Views of 20 distinguished speakers in the fields of medicine, law and insurance from Great Britain and the U.S. are presented. One of the outstanding revelations of the conference was the startling difference between medical practice in the two countries as illustrated in the two approaches to litigation for medical negligence. 227 pages—$20.

* * *

Doubleday has released "Health-Wise Handbook," a family home education and advice treatise that outlines prevention and treatment of common illnesses and minor injuries and teaches the best way to consult and work with a physician. Keith W. Sehnert, M.D., author of the best-selling "How To Be Your Own Doctor . . . Sometimes," recommends the book for all parents. 260 pages—$6.95.

* * *

Lexington Books announces "The Harassed Worker" my psychiatrist Carroll Brodsky. He analyzes the problem of harassment in the workplace through case studies and personal interviews. Dr. Brodsky considers harassment as a basic cause of industrial hazards and of psycho-somatic illnesses. 176 pages—$15.

* * *

Delacorte Press has released "The Awakened Mind," a book by C. Maxwell Cade and Nona Coxhead. The book can help rid one of stress by showing new paths to relaxation and health. It shows how to combine biofeedback with meditation to develop higher levels of awareness.

* * *

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

INDIANA MEDICAL BUREAU

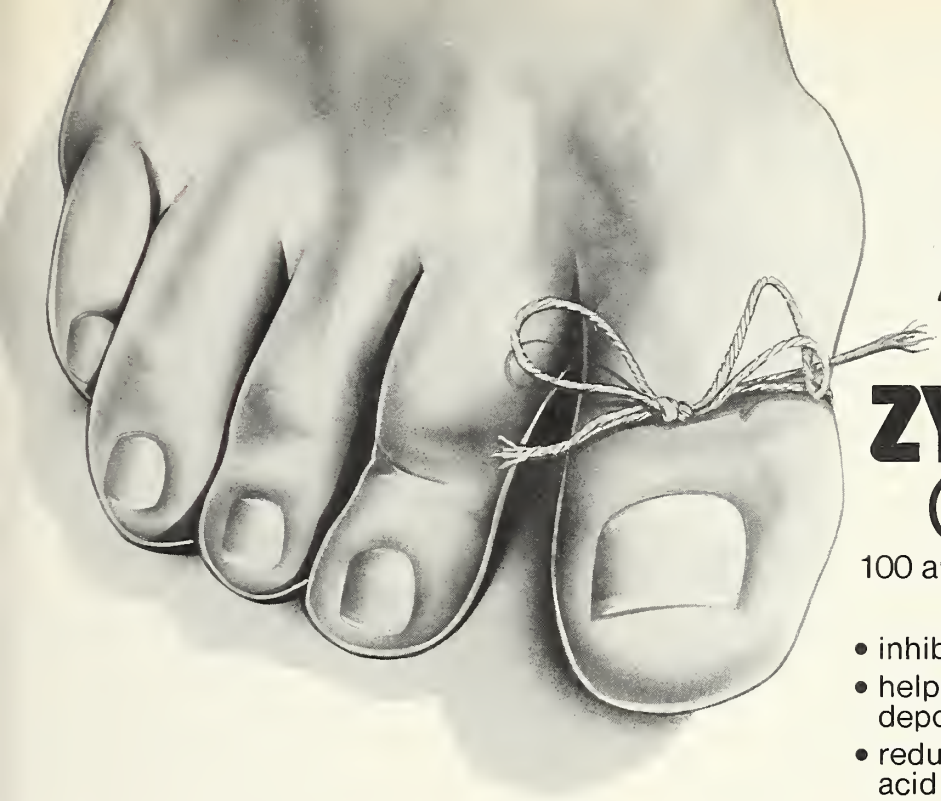
1010 East 86th St.—72 Winterton

Indianapolis 46240

844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service



A reminder

ZYLOPRIM®

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim® (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

CONTRAINDICATIONS: Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.

WARNINGS: ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol® (mercaptopurine) or Imuran® (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

Usage in Pregnancy and Women of Childbearing Age: Zyloprim® (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

PRECAUTIONS: Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or subnormal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

ADVERSE REACTIONS:

Dermatologic: Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.
Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.
A few cases of alopecia with and without accompanying dermatitis have been reported.
In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

Gastrointestinal: Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

Vascular. There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

Hematopoietic: Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim® (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

Neurologic: There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

Ophthalmic: There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

Drug Idiosyncrasy: Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

OVERDOSAGE: Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

HOW SUPPLIED: 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION (USPS 284-440)

Volume 72—March 1979—Number 3

Contents

SCIENTIFIC ARTICLES

173 Facial Paralysis: Diagnosis and Treatment—
Laverne B. Tubergen, M.D.
(15th Continuing Medical Education article)

182 The Five Fingers of Cardiology: Radiograph—
R. Joe Noble, M.D.

184 Intracellular Lipid in Pseudohypertrophic Muscular Dystrophy Tissue Culture—
Charles A. Bonsett, M.D.

192 Superior Vena Cava Syndrome Caused by Intrathoracic Goiter—
Anastacio C. Ng, M.D.

198 Biofeedback in Headache Management—
Gwen Heaton, B.A.

EDITORIALS

146 Editorial Notes

148 Rules Should Be Broken

SPECIAL FEATURES

153 Commentary: A Pint and a Cup

154 ISMA Board Actions

158 Profile: Dr. Janice Helvie, Columbus

162 Drug Substitution Drive: 'Bureaucratic Tinkering'

166 ISMA Calendar of Events

188 Court Action: Physician-Medicare Providers

DEPARTMENTS, MISCELLANEOUS

141 Medical Museum Notes

142 What's New?

153 There's a Word for It

156 Auxiliary Report

161 Cancer Corner

166 Future File

200 Book Reviews

204 News Notes

212 Obituaries

1979 ROSTER OF MEMBERS (SUPPLEMENT)
3/215-203/418 *(See Page 213 for ordering information)*

ABOUT THE COVER



Sheep shearing is one of the special attractions at the annual Wakarusa Maple Syrup Festival, to be held March 16-17. It is sponsored each year by the northern Indiana town's Chamber of Commerce. Other attractions include sap water being boiled to make maple syrup, wool being spun into yarn, horseshoeing, a motocross bike race, wood carving, antique show, woodsplitting, a hog roast, a chicken barbeque and educational tours.

EDITORIAL AND ADVERTISING INFORMATION

All articles must be typewritten, dauble-spaced with margins of one inch.

Phatagraphs shauld be printed on glossy paper. Negatives cannot be used.

Illustratians are desirable. Selectian af illustrations submitted at discretion of editar and editorial board members.

Cantributars are responsible for all statements made in their articles. The editors and editorial baard members may not be in agreement with all views expressed by authars, but it is desired to give all authors as great latitude as possible.

Articles are accepted for publication with the understanding that they are submitted for exclusive publication.

Advertising rates will be furnished on request. Copy must be received by the 1st of the month preceding month of issue.

Representative for natianal advertising is the State Medical Jaurnal Advertising Bureau, 711 South Blvd., Oak Park, Ill. 60302.

Annual subscription rates: ISMA members, $8, included in annual membership dues; ISMA senior members, $10; Libraries, $12; all others, $14. Additianal postage: Canada and PUAS cauntries, $2; Fareign, $3. Subscriptions are renewable in July and January.

Entered as secand class matter January 25, 1933, at the Postaffice at Indianapolis, Indiana.

THE JOURNAL af the Indiana State Medical Assaciation (USPS 284-440) is published manthly by the Indiana State Medical Assaciation, 3935 N. Meridian St., Indianapolis, Ind. 46208. Secand-class postage paid at Indianapolis, Ind., and at additianal mailing office. Na capyright is claimed.

All issues of 1967 and subsequently may be obtained on microfilm. Address The Journal for details.

Our International Standard Serial Number is ISSN 0019-6770.

Indexed in Index Medicus and Haspital Literature Index.

Six important reasons why physicians are selecting the Reality® Medical Management System.

1. Improved Cash Flow. Timely patient statements which reflect the detailed account status of charges, payments and aged account balances contributes to faster payments and a reduction of bad debts.

2. Totally Automated Insurance Processing. The **Reality** Medical Management System has incorporated the processing of Medicare, Medicade, Blue Cross, Blue Shield and most other third party payors into the automatic billing and insurance claim reporting function, thus, eliminating clerical time, errors and lost charges.

3. Direct Control. No reports, no files, no charge tickets leave your office. Your personnel, who know your method of operations, communicate directly to the computer based system via a video display terminal. Everything is processed according to your schedule and in a manner which fits your Doctor to Patient relationship.

4. Improved Practice Control. From the management reports and practice statistics, your practice can be managed in ways which will more effectively utilize the resources of the practice, thus, generating a better return on your total investment.

5. Better Patient Care. Research by diagnosis can lead to better patient care. The System maintains data by patient, by procedure and by diagnosis, whereby, retrieval and analysis can provide historical treatment histories. Better patient scheduling by the System makes for better patient relations.

6. Communication With The System In English. Unlike other automated systems, the **Reality** Medical Management System is under your direct control (not through a programmer) in a common language used by human beings — known best as **English**. If you can type, you can talk to the System.

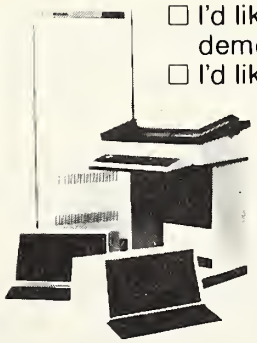
Take A Good Look At Reality. Call Anacomp or send in the coupon today for a free hands-on demonstration. Within 15 minutes you'll know all you need to know about choosing a computer.

Microdata

Attach your business card and send to:

Anacomp
4755 Kingsway Drive
Indianapolis, Indiana 46205

For immediate response, call **317/257-1426**



Show me.

☐ I'd like a free hands-on demonstration of Reality.®

☐ I'd like more information.

EDITORIALS

Editorial Notes . . .

More than 70% of U.S. physicians consider saccharin absolutely essential or of great value in the treatment of diabetes, and 55% of physicians surveyed consume foods and beverages containing saccharin. The Calorie Control Council asked Market Facts Inc. of Chicago to do the survey for submission to the National Academy of Sciences. Close to 30% of the doctors thought, "Some people will die if saccharin is banned and no substitute is available."

U.S. health care is an export item. So reports BUSINESS WEEK in an article that rates our health care as tops in the world. It is naturally going in large chunks to the Middle East where petro dollars are plentiful. Petro dollars are not the big factor, however. One American corporation is building three hospitals in Britain to care for the tremendous demand there for private medical service. One U.S. company explains the worldwide demand for our brand by saying, "U.S. health care is viewed as absolutely the best."

The Medical Hall of Fame in St. Louis is in the process of collecting the names and pertinent data of physicians who are being nominated by the state medical associations and the medical specialty societies. Indiana has nominated John S. Billings, M.D., noted for having organized the Army's Surgeon General's Library and the Index Medicus; John S. Bobbs, M.D., Dean of two early Indiana medical schools and the surgeon who performed the first operation for gall stones; Harvey W. Wiley, M.D., credited with inspiring the first federal food and drug law; and Frank B. Wynn, M.D., creator of the AMA Scientific Exhibit.

The incidence of ruptured appendices in children actually on the increase, according to a report by th American Academy of Pediatrics. The mortality rat for appendicitis in children has not changed sinc the 1940s, when the introduction of antibiotics pro duced the most recent improvement in mortality. A parents should know the signs of and the seriousnes of appendicitis. This is a preventive measure tha should be emphasized by the physician when the chil is seen for the first time. Alertness to the situation– alertness on the part of physicians and parents—i the only thing that will further improve the mortality

The Emergency Physician's Poem

The following poem, which I composed Nov. 1(1978, is dedicated to my wife Rosemarie:

I'd say it means a lonely life
to be an emergency physician's wife.
She tells him that he needs some rest
when she knows that he's not at his best.
The lonely life she leads when he's on call,
she knows is for a worthy cause . . .
Her children harass her day and night,
for Daddy's too busy to set them right.
In the wee hours when the doctor leaves,
she sometimes wonders what's up his sleeves
They share together, this man and wife,
what they both surely know is a good, good
life . . .
I'd say it means a lonely life
to be an emergency physician's wife.

JOHN J. GALLINATTI, M.D
Crown Point

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

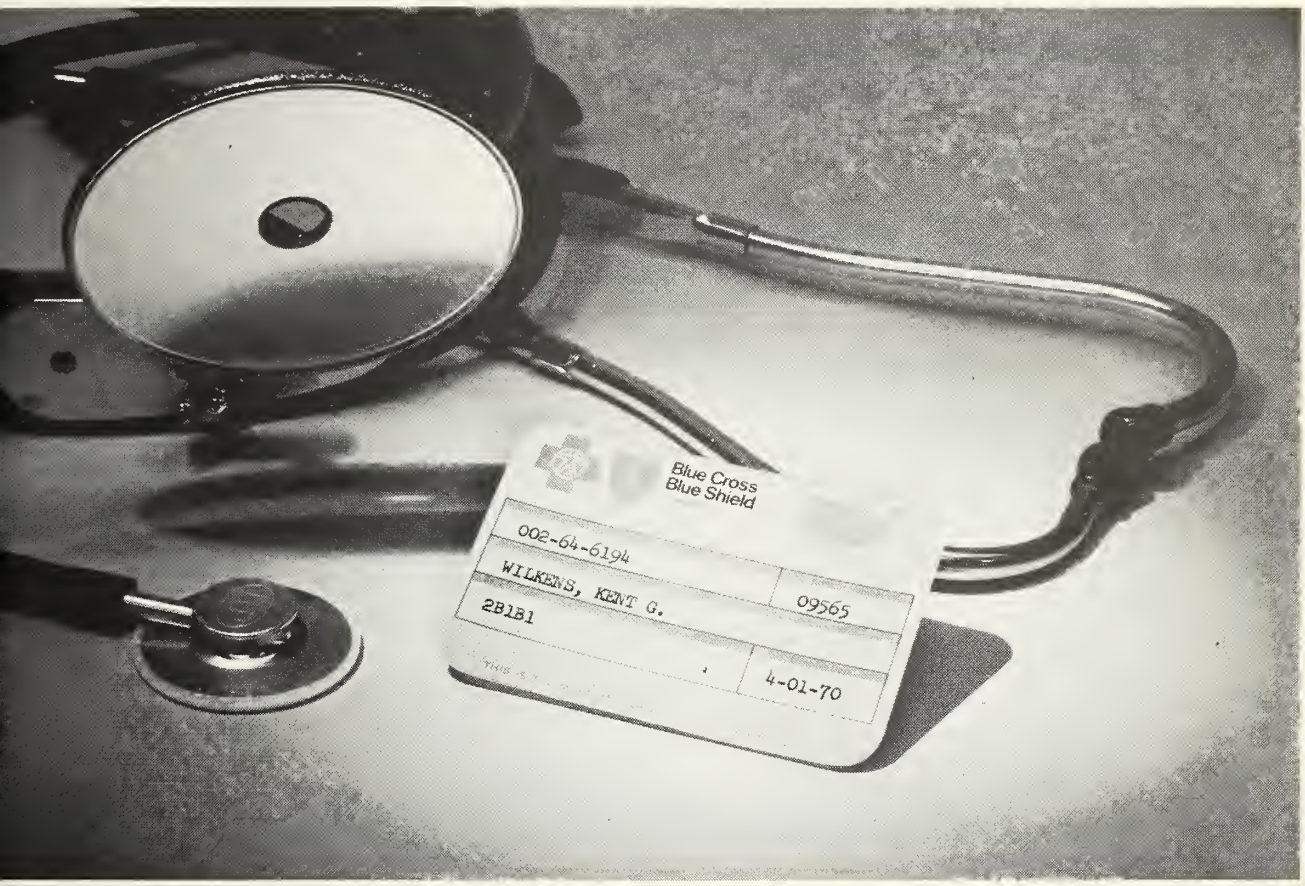
Editor: Frank B. Ramsey, M.D., 3935 N. Meridian Street, Indianapolis 46208.

Consulting Editors: A. W. Cavins, M.D., R.R. 25, Box 172, Terre Haute 47802; Lall G. Montgomery, M.D., R.R. 1, Box 202, Gaston 47342; Samuel R. Mercer, M.D., 702 Medical Center Bldg., Fort Wayne 46802; I. W. Wilkens, M.D., 4820 E. Pleasant Run Pkwy., N. Dr., Indianapolis 46201; W. D. Snively, Jr., M.D., R.R. 1, Box 227, Evansville 47712; Charles A. Bonsett, M.D., 6133 E. 54th Place, Indianapolis 46226.

Editorial Board: Term Expire
Steven C. Beering, M.D., Indianapolis Dec. 31, 1981
Paul S. Rhoads, M.D., Richmond Dec. 31, 1981
Elton Heaton, M.D., Madison Dec. 31, 1979
Radney A. Mannion, M.D., La Porte Dec. 31, 1979
Alvin J. Haley, M.D., Fort Wayne Dec. 31, 1980
Wei-Ping Lah, M.D., Gary Dec. 31, 1980

Business Manager: Donald F. Fay 3935 N. Meridian, Indianapolis, Ind. 46208 Managing Editar: Martin T. Badge

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- **One full year in-hospital care**
- **100% semi-private room and hospital extras**
- **Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy**
- **$250,000 Major Medical Benefits**

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Paul Biltimier, Senior Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4241.

We believe in being better

Blue Cross Blue Shield
of Indiana

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark, Nat'l Assn. of Blue Shield Plans

Guest Editorial

Rules Should Be Broken

L. A. ARATA, M.D.
Shelbyville

Rules are what we live by. They come in all states of formality and permeate all phases of our lives. They provide guidelines necessary to run any organization smoothly. They run the gamut from the Ten Commandments to society's laws, to medical staff regulations, to family life.

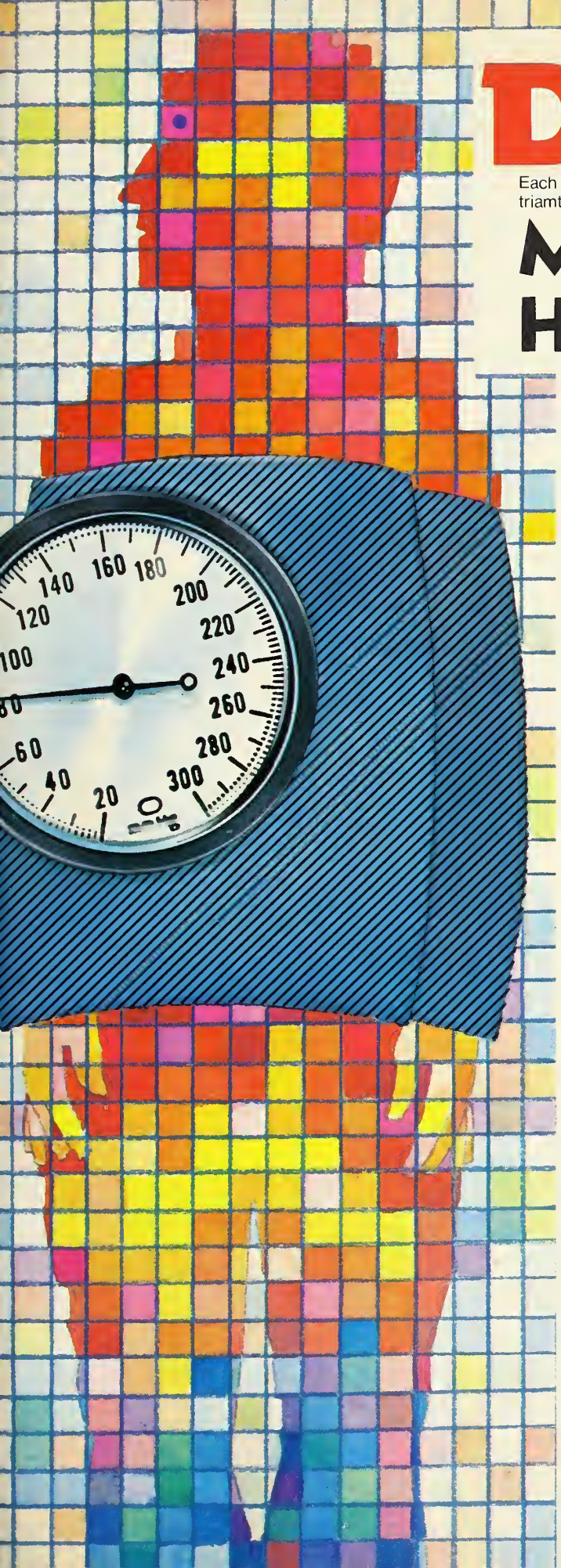
If rules are so necessary in our everyday lives, why do I say they should be broken? It seems to me that basically rules are one person's or one group's ideas about what constitutes good judgment under specified conditions. Since conditions change, and circumstances do not always fit the rules, rules must be broken when good judgment so dictates. No rule maker is so wise that he can foresee all possible eventualities and formulate rules to cover them all. If he did, the rule book would be so cumbersome and large that no one could know the rules or learn them.

At all times, sheer stupidity results when the rules are so sacred that none may violate them. Herein lie the basic causes for so much of our governmental bureaucratic stupidity. All government programs operate by the rule book and no one has the right to deviate from "the book." The rule book becomes the club of the bureaucrat regardless of circumstances. Stupidity is the result of making the rule book a deity, and the reasons why a program was enacted are lost or perverted by the rule makers. As a result, programs governed by a set of inflexible rules seem to benefit chiefly those bureaucrats hired to enforce the rules.

Show me a doctor who has never broken a hospital staff rule and I'll show you a doctor who never used his head; show me a man who has never broken any rules and I'll show you a weak, unthinking, stupid oaf.

★
Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
Since 1899
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Maeller, Representative
1810 Braad Ripple Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indianapolis 46220
Northern Indiana Office: Douglas O. Sellon, Representative
120 LaSalle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332



Dyazide®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Makes Sense in Hypertension*

Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:

* **Warning**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K+ frequently; both can cause K+ retention and elevated serum K+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

SK&F CO.
a SmithKline company
Carolina, P.R. 00630


When painful spasm
is the presenting
symptom...

..in the functional bowel/irritable bowel syndrome*

Bentyl®

(dicyclomine hydrochloride USP)

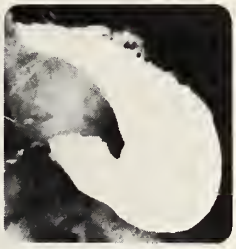
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

8-4420 (Y736A) MNR-804

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension, loss of taste, headache, nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis, urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons, and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique that we have over $4,000,000.00 in personal loans made to Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Colin G. Haza
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis Morris Plan

Commentary

A Pint and a Cup

RICHARD J. NOVEROSKE, M.D.
Evansville

As the metric system continues to come on in the United States, and we change to this easier way of measurement, we have decided to retain a couple of old measurements, used primarily in cooking—the teaspoon and the tablespoon. The teaspoon is redefined as having a volume of 5cc, and a tablespoon is redefined as having a volume of 15cc.

Similarly, I think the pint and cup—so handy to the homemaker in cooking—will be redefined in convenient metric units, near to what they presently mean.

I think the pint will be redefined as 500cc. In medicine we now speak loosely of a "pint of blood," when it actually is a "unit of blood," equal to 500cc. When the liquid pint is redefined from a volume of 473cc to a volume of 500cc, there will be little disturbance in traditional cooking recipes, for the amount of change is about 5%. This amount of change will permit us to be metric and still use an old, convenient measurement.

Similarly, I think the cup will be redefined from half of our present 473cc liquid pint to 250cc. I think Americans, particularly homemakers, find it too useful to discard or to relabel with a new term. Then too, we like short, one syllable words that get the job done quickly, such as "pint" and "cup." And if they're redefined in easy metric terms, I see no reason for discarding these long useful measurements.

I doubt that "ounce" will be retained; there are three different ounces: advordupois, apothecary, and Troy. When we go metric we will probably discard "ounces" because of the confusion from the different definitions. Then too, if we were to define the liquid ounce as 30cc, that really wouldn't give a convenient metric value that would blend well with the rest of the system. We have found that we can work easily in our minds with halves, doubles, tenths, and tens, but thirds is another ball game. We've worked with thirds of a yard—feet—for a long time, but it is an inconvenience. We've learned to live with it, but there is no need to transplant inconveniences when we go to a new system.

I think "quarts" will probably fall by the wayside. The liquid quart is so near the liter, with 946cc compared to the 1,000cc liter, and the liter is so internationally popular and so persistent, even though it is not an official part of the metric system, that our liquid quart will probably give way to the liter. Then too, there is some confusion with quarts—are you speaking about a "wet" or a "dry" quart; our present English system recognizes both types of quarts and gives different volumes for each.

These shifts to convenient, simple metric standards are the rebuttal to people who ask, like a former British Prime Minister did of Parliament, "Do you mean that a man in his local pub is going to have to ask for '0.473 liter of beer'?"

Of course the man won't. He'll ask for "a pint" or perhaps a "half liter." They'll both be equal to 500cc.

Dyspnea or Short of Breath

There's a Word for It

RICHARD J. NOVEROSKE, M.D.
Evansville

Dyspnea, short of breath, or *difficult or labored breathing* are common words used by physicians, nurses, and technologists to describe a common symptom. These words seem appropriate; they're to the point. But there is a tendency to abbreviate words and phrases, and often *short of breath* is abbreviated *s.o.b.* on a request or elsewhere in the hospital records. Many people before me have objected to this particular abbreviation, and I do, too.

The expression *son of a bitch* means that the man is an incestuous male; I know, because I raise dogs and have watched them. Incest is about the most repugnant act you can accuse a person of. And any derived term, even an abbreviation like *s.o.b.,* is an emotionally laden one.

To put *s.o.b.* on a patient's request or other hospital form seems wrong, even though *short of breath* is the intended meaning. The abbreviation has such a strong connotation of incest that it's insulting to the patient.

Take the time to write out the full word or phrase.

ISMA Board Actions

(The following actions were taken by the ISMA Board of Trustees during their regularly scheduled meeting Jan. 14, 1979.)

Board Certification

. . . Expressed opposition to the requirement of "board certification" included in HSA criteria and standards for cardiac catherization services, computed tomography services, etc. The Board's position is "that the wording contained in HSA-established criteria and standards developed by HSA Technical Advisory Committees designate that physicians be 'board certified or otherwise qualified by experience and training.' "

Member Health Care

. . . Approved Plan A (Full Service Plus Major Medical) of the Blue Cross-Blue Shield health care program for ISMA members, noting that the premiums have been reduced 10%. Besides lower payments, several new benefits are being added to the package, effective April 1, 1979. The Board also approved Plan B (Major Medical Only), reflecting a premium reduction of approximately 8%.

Public Relations Director

. . . Approved a recommendation by the Commission on Public Relations that ISMA hire a full-time Director of Public Relations. The Board directed that a complete report detailing public relations achievements, together with financial requirements for continued operations, be presented to the House of Delegates in October 1979. The Director of Public Relations will plan, organize and direct activities resulting in maximum favorable visibility for ISMA members, programs, goals and accomplishments. The program will be targeted to both the public and the ISMA membership.

AMA Delegate Elected

. . . Unanimously approved the selection of Dr. George T. Lukemeyer of Indianapolis to fill the vacancy created by the death of Dr. James A. Harshman. He will serve as AMA delegate until the next meeting of the ISMA House of Delegates in October 1979.

Certificate of Need

. . . Adopted the Executive Committee's recommendation "that ISMA unequivocally opposes Certificate of Need, as mandated by the (1976) House of Delegates," and requests the ISMA staff to develop a position paper indicating reasons for opposition. The Indiana State Board of Health (ISBH) is supporting the introduction of legislation that would officially charge ISBH's State Health Planning and Development Agency (SHPDA) with the responsibility for operating the Certificate of Need program under PL 93-641, Health Planning and Development Act.

Nurse Practitioners

. . . Expressed opposition to the independent practice of nurses functioning in an expanded role, and directed that the Commission on Medical Education develop a policy statement regarding nurses in independent practice. The Commission on Legislation was directed to take whatever action deemed appropriate to deal with relevant legislation. The Board felt that independent nursing practice is similar to activities of physician assistants and therefore should be regulated by the Medical Practice Act rather than the Nurse Practice Act.

Insurance Claims Review

. . . Directed that staff legal counsel investigate what county medical review committees may or may not do concerning insurance claims review. The FTC maintains that such committees are acting in "restraint of trade" if they act as a "fee-setting" body.

Miscellaneous

. . . Tentatively accepted Oct. 15-19 as dates for the 1983 ISMA annual meeting, to be held in Evansville. ISMA annual meetings from 1979 through 1982 will be held in Indianapolis.

. . . Referred to the Executive Committee for further study the disposition of ISMA-owned properties.

. . . Submitted nominees to the Executive Committee from the northern, central and southern areas of Indiana for selection as participants in the annual ISMA Washington visit, scheduled for April 23-25.



ROCKWOOD
INSURANCE COMPANY OF INDIANA

Professional Liability Insurance Specialists

Physicians, Surgeons, Dentists

Hospital Professional Liability

Represented by:

Health Care Provider Insurance Agency, Incorporated

INDIANAPOLIS . . . Hadley-Mahoney Co., 3640 N. Washington Blvd. 46205
(317) 924-5331

MICHIGAN CITY . . Lindenmeyer Insurance Associates, Inc.
801 East Eleventh Street 46360
P.O. Drawer C
(219) 879-7301

SEYMOUR Wienco, Inc., Room 20, Vehslage Building
P.O. Box 518 47274
(812) 522-2931

SOUTH BEND Hepler-Smith Insurance, Inc.
511 West Colfax Avenue
P.O. Box 1875 46634
(219) 232-4889 (Toll Free 1-800-552-2910)



AUXILIARY REPORT

Ruth (Mrs. G. Beach) Gattman
President, ISMA Auxiliary

Despite the weather, which kept the far north and far south poorly represented, our January executive committee and board meetings were held on the appointed day. We learned that, for the moment at least, Indiana was first in membership submitted to the AMA Auxiliary. Special thanks to the county treasurers for sending in their dues promptly and to our state treasurer, Karen Schleinkofer, for her effortless efficency.

The board was privileged to hear Dr. Steven C. Beering discuss how our AMA-ERF contributions have been used at the Indiana University School of Medicine. AMA-ERF contributions continue to be ahead of this time last year, reports Lois Golden, State AMA-ERF chairman. If you haven't contributed to this worthy cause, why not contact your county AMA-ERF chairman? She'll be happy to take your donation. If you have any questions about the need for your undesignated funds for medical schools, contact Dr. Beering and you'll be motivated to contribute even more.

A State Long Range Planning Committee was formed this year and, to date, three meetings have been held. The committee has studied short and long range goals, and has had to face some difficult decisions. Chloe Goldsmith is chairman. Good planning is a must if the Auxiliary is to remain a vital, responsive organization. I'm grateful to the committee for the time and effort they have exhibited.

Our bylaws have been reviewed and proposed changes will be presented to the House of Delegates for approval in April. A raise in dues, approved by the board, also will be presented to the House of Delegates. With finance chairman Beth Bowen's three-year accounting of our Auxiliary finances, it was not difficult to see that state dues of $2 per member no longer is enough to do a good job.

1979 is the Year of the Child and our work in in munization is especially appropriate during this yea School systems in Indiana are obtaining complet audits of immunization levels in grades 1-12. Th audits in grades 1-9 now are being completed, wit grades 10-12 to be done this spring. Working with th State Board of Health and the Immunization Actio Committee, the Auxiliary will be assisting with audit in school systems that request our help. To date, 4 school systems have asked for our help. In schoo systems where we have no organized auxiliary, th Association for the Retarded, the Federation o Women's Clubs, the PTA or some other voluntee group will be asked to assist. Training meetings wil be conducted by the state or county board of health We're hoping these audits will show that Indian parents are ahead of other states in having thei children immunized against DPT, Polio, Rubella Rubeola and Mumps. Indiana physicians are doin an outstanding job of encouraging parents to promot "wellness" through preventive medicine. We're excite about coordinating all efforts in the area of immuni zation for the state and happy to be a part of thi program.

So far this year, I have been privileged to visi all but 11 of our organized county auxiliaries, and hope to be invited to all before our Auxiliary yea ends. It is always a pleasure to get to know eac county auxiliary better and to tell them about th programs and activities of the ISMA and the AMA Auxiliaries. The ISMA Auxiliary is in excellent con dition, thanks to the contribution of each member an the leadership of the state board. This truly ha been a year to remember. I'm grateful for having th opportunity to know so many fine people.

McClain Car Leasing, Inc.

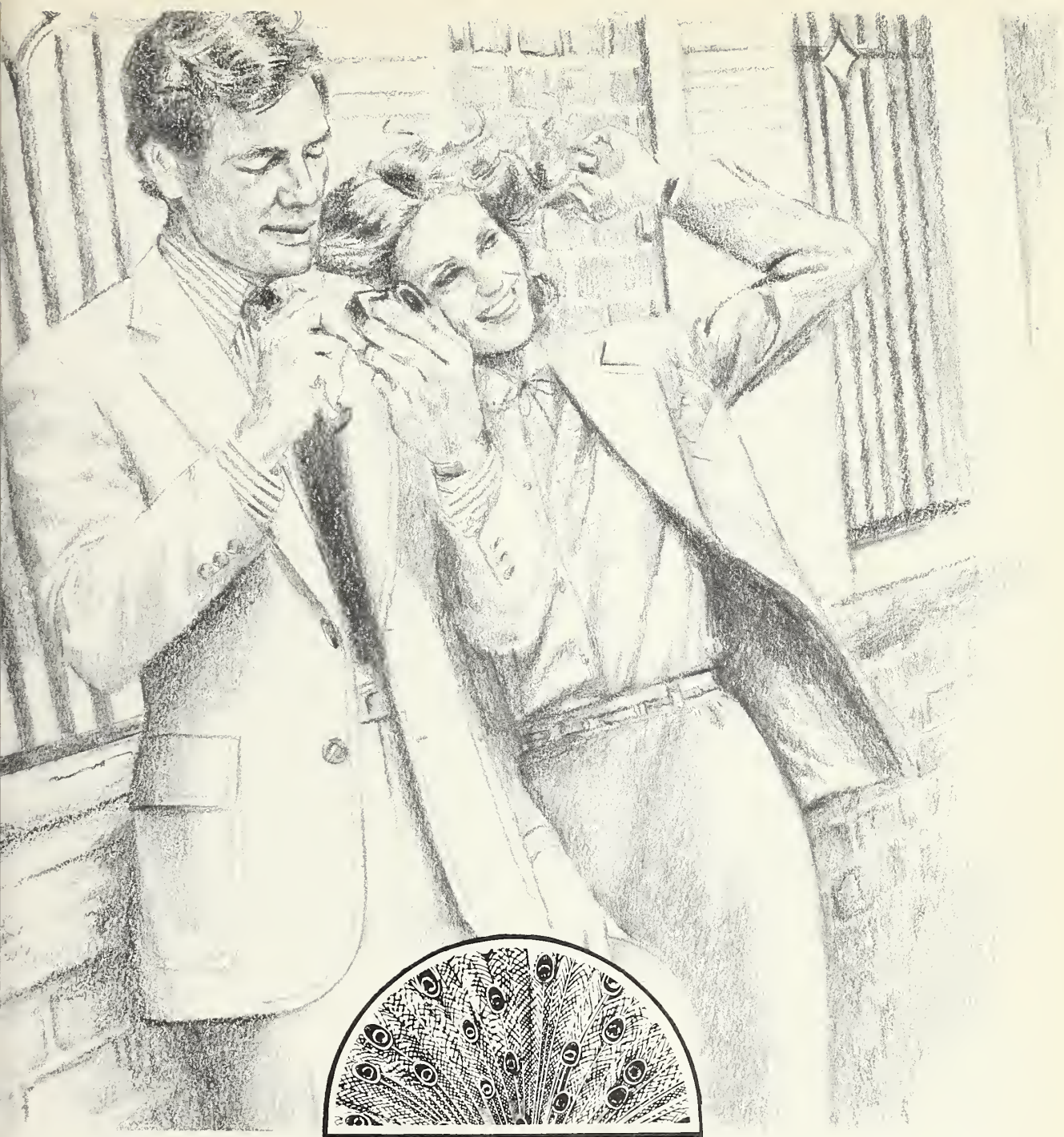
1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA



SPRING'S CLASSIC LOOK

The Oxford Shop offers the finest in quality clothing for men and women. For spring this year, you'll want to look your brightest and best wearing clothing of fine quality in the Oxford Shop tradition. Come to the Oxford Shop for your new spring look where they offer the latest, most fashionable, expert tailoring, coupled with the finest fabrics.

Oxford Shop

FOR THE GENTLEMAN
FOR THE LADY

INDIANAPOLIS

The Fashion Mall
8702 Keystone Crossing
Gentlemen 844-8689
Ladies 844-2207

BLOOMINGTON

512 E. Kirkwood
332-4056
College Mall
332-5376

LAFAYETTE

Market Hall
Market Square
447-9169

Dr. Janice Helvie

Private Practice More Challenging

Don't expect Janice Helvie to say she became a family physician to save humanity—or for some other glorified reason. She simply enjoys what she's doing.

Dr. Helvie has been in general practice in Columbus for two years, after spending her first nine years as a physician at the Indiana University Health Center at Bloomington.

"This is more challenging," she says of her Columbus practice. Now she can see and administer to her patients over a period of time, seeing them through medical problems, or from infancy to childhood and so on, instead of treating patients only during their college years.

Dr. Helvie believes a doctor is more than someone who strives to cure physical ills.

"Nearly anyone can be a technician—the art of medicine and healing goes much deeper than that."

"Yes. A lot of people are surprised when they walk through the door and see I'm a woman," she says in answer to an inevitable question. However, she says any wary feelings usually dissipate as she strives to put the patient at ease.

When a person comes in with a complaint, it may be one of 30 in your life that day, but to that person it's of greatest importance to his life, she explains.

A native of Kokomo, she was graduated from Indiana University at Indianapolis in 1967.

"I was always interested in medicine and my folks were very supportive."

The interview for admittance into medical school she thinks was "definitely a biased kind of procedure—subtle maybe, but still biased."

"The question of marriage and 'what are you going to do when the time comes to have children' were asked."

Once in medical school, however, she say one's own merits determined whether he or she stayed.

Dr. Helvie, one of 11 women in a class of over 200 medical students, says she did feel some pressure to succeed because of her sex, but also "I like to do well at something if I try it."

Speaking of her reaction to Columbus, she says, "Here I feel very well accepted and appreciated in the medical community."

Being on call every third night and usually long office hours often keeps her away from her family more than she would like.

But she stresses she's married to an "extraordinary man" and has three teen-age daughters who share the home responsibilities.

Husband Jim Helvie is an "entrepreneur," owning an antique and import shop in Nashville, as well as farming land near their Brown County home.

Long walks in the country or listening to favorite music keep the medical problems of the day from intruding into the family life of the Helvies.

"You don't internalize or take it home with you," she says.

Yes, she says she does indeed get the typical medical inquires popped at her at cocktail parties or other social functions or wherever she may be away from her office.

She comments that this can become an awkward or difficult situation. "Obviously you don't like that. You must get your mind in gear and use some professional judgment," she says.

Dr. Helvie has some definite philosophies on life.

Once seriously considering utilizing her medical skills as a missionary, her religious feelings changed somewhat during the learning process.

"You begin asking a million questions," she recalls. "I believe there is a rational answer to almost anything if reason is used."

She also has some definite philosophies upon death.

"I try to be as honest as I can with my patients," although she admits a patient's death is "something I'm bothered by still."

"I don't have really good answers. Every case is different.

"Some will lead me along and say 'I'm ready to hear what you have to tell me.' "

The responsibility that comes with her job can be "terrific," she says.

A 3 a.m. hospital call followed by a full day of patients can be draining, but "They couldn't pay me enough if I didn't like it."

Any physician who thinks he or she is infallible is a fool, says Dr. Helvie, but "you still must believe in yourself.

"If you don't believe in yourself you can't possibly do anything good for someone else."

Reprinted with permission from the COLUMBUS REPUBLIC, Columbus, Ind. Original article by Lynn Hailey.

The Great Laxative Escape



COLACE®

dioctyl sodium sulfosuccinate

Colace means escape—from laxative stimulation, from laxative harshness, from laxative habit. Colace gently helps soften stools for easy, painless, unstrained elimination. It's the great laxative escape, from infancy to old age. Available in 100 and 50 mg. capsules. Syrup or liquid.

Mead Johnson

PHARMACEUTICAL DIVISION

©1978 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. J5178-1

This asthmatic isn't worried about his next breath...



he's active
he's effectively maintained on

QUIBRON

Each capsule or tablespoonful (15 ml) liquid contains theophylline (anhydrous) 150 mg and glyceryl guaiacolate (guaifenesin) 90 mg

- theophylline for effective around-the-clock bronchodilator therapy
- 100% free theophylline

Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e. clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100; Liquid in bottles of 1 pint and 1 gallon.

See package insert for complete prescribing information.

Mead Johnson

PHARMACEUTICAL DIVISION

© 1979 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. MJL 6-422

WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

CANCER CORNER

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

OLORECTAL CANCER: CREENING, DETECTION

A conference on the screening nd early detection of colorectal ncer, sponsored by the Division Cancer Control and Rehabilitaon of the National Cancer Instite, was held June 26-28, 1978. his was one of a series of connsus development meetings to exnine aspects of medical technolgy that may be ready for wider pplication or broad scale demonration programs at the community vel. To the extent appropriate, e meetings are also intended to velop useful information as the sis for public and physician edution programs. The objective of e June conference was to evaluate e scientific evidence related to lorectal screening.

ONCLUSIONS AND ECOMMENDATIONS

The following conclusions and commendations were made:

1. There are insufficient data to dicate that screening for colorecl cancer by stool occult blood testg reduces mortality from the dise in screened populations particiting in clinical trials. More time is eded for ongoing clinical trials to llect enough additional data for sessment of survival benefit, risk ssibilities and economic feasibili-

Although it is recognized that cisions must sometimes be based incomplete evidence, caution is vised in the development of recmmendations about mass screeng programs for colorectal cancer this time.

This caution is based on the abnce of a clear demonstration of) improved survival rates in reened individuals with colon ncer or (b) a net margin of bene- to health in comparison with the sts and risks entailed in the further study of all positive occult blood reactions by barium enema and/or endoscopy.

2. Until more knowledge of the benefits and risks of screening for this cancer site is available, mass screening demonstration programs should not be initiated by the Division of Cancer Control and Rehabilitation, NCI.

3. Because the method for occult blood testing is commercially available for unrestricted use by practicing physicians or other health care service providers, the following advice for professional use is recommended:

a) The benefit/cost/risk indices for stool occult blood testing cannot be determined at this time. In light of present information, the uncontrolled application of the method outside of special evaluation studies may not represent a wise use of health care resources and may not be of benefit to the recipients.

b) Where used, the technique should be limited to asymptomatic men and women over the age of 40 unless there are additional personal or familial risk factors.

c) Where used, the procedure should include: a meat-free high fiber diet for a reasonable period of time before preparing the first slide; storage of specimens for less than four days before testing; no rehydration of slides when using Hemoccult II slides; the recording of all results as positive or negative (doubtful readings should be recorded as negative and trace readings as positive); the handling of a single positive slide as if all slides are positive.

d) At present, all positive tests should be followed by complete examination of the colon by radiological and/or endoscopic means.

e) Expertise and facilities for diagnosis and treatment should be readily available for follow-up.

f) Fecal occult blood testing should not be used at present as a substitute for proctosigmoidoscopy or as a basis for clinical decisions in patients with symptoms of colorectal cancer.

4. The major controlled clinical research trials that a reevaluating colorectal cancer screening using occult blood testing should be continued.

5. Because the definitive diagnosis of colorectal cancer must be geared to the proper interpretation of the pathology, including all the histologic variations in adenomas and the premalignant and malignant changes that may occur within them, the development of a uniform interpretation and nomenclature is needed.

6. The appropriate national professional organizations should educate the radiological, medical and surgical communities regarding the importance of an air contrast study in addition to the standard barium enema in the radiological examination of the patient suspected of having a neoplasm or small polypoid lesion of the colon. Physicians should be encouraged to assume responsibility for adequate cleansing of the colon prior to the barium enema. The risk and expense of this radiological examination are not justified in poorly prepared patients.

Recommendations made by the Conference for further research will be detailed in the final summary and meeting proceedings.

The Conference Steering Committee has submitted the above conclusions and recommendations for the information of practicing physicians and health planners. Additional information can be obtained by writing Dorothy R. Brodie, M.D., National Cancer Institute, Bethesda, Md. 20014.

Drug Substitution Drive:

"SINCE 1970, 38 states have enacted 'generic' drug substitution laws. To our knowledge, not one can document significant savings to consumers . . . and no amount of bureaucratic tinkering will alter the result."

C. Joseph Stetler, president of the Pharmaceutical Manufacturers Association, made these comments recently in discussing HEW-FTC actions on drug substitution. He said:

"Many doctors and pharmacists do not endorse substitution because scientific evidence reveals serious drug equivalence problems. Moreover, substitution laws are economically impractical. They attempt to squeeze savings out of products that continually have represented a smaller amount (from 12 cents in 1967 to 8 cents in 1977) of every dollar Americans spend on health services . . .

"FTC estimates of hundreds of millions of dollars in consumer savings due to substitution laws are based upon utopian premises, nonexistent in an imperfect world. Drug substitution laws serve mainly to preempt professional judgments and to discourage industry innovation. Drug firms that specialize i cheaper drugs and spend nothing o research may temporarily gain ad vantages here and there from market artificially restructured i their favor by government. But ult mately consumers will lose the ecc nomic and health benefits of ne

'Bureaucratic Tinkering'

drug therapies provided by re search-intensive firms.

"PMA has no objection whatsc ever to the dissemination of mean ingful retail price information t consumers. But the price compet tion the HEW-FTC effort purport to encourage already exists in highly competitive and efficien marketplace between and amon both brand and generics . . .

"This intrusion by agencie seeking to drive down drug price regardless of social costs over simplifies the irrelevant brands generics issue. PMA companie make most of the generic as well a most of the brand specialty dru supply. The question should not in volve drug nomenclature but th competence of the source and th consistent quality of the product Nothing in the proposal really ad dresses that issue beyond the gli assumption that the FDA can as sure the uniform quality of a marketed drugs at any given time Given its limited resources, th FDA simply can't make such guar antees."

—PMA Newsletter, Vol. 21, No. Jan. 15, 1979.

AMA's Drug Substitution Position

The AMA has expressed concern over a joint HEW-FTC proposal for a model "drug product selection" law for the states. It would allow a licensed pharmacist to select a generic product, which the FDA has determined to be medically equivalent, for a brand-name drug prescribed by a physician. The physician would be able to assure dispensing of the brand-name by writing "medically necessary" or some similar expression on the prescription.

"The AMA's position is that the doctor should be responsible for the selection of the drug and that he or she should substitute generic drugs only when medical considerations and cost considerations make the choice proper for a particular patient," said Dr. Robert B. Hunter, chairman of the AMA Board of Trustees.

PMA Suit Addresses the Real Issue

The PMA suit against the Health Care Financing Administration (HCFA) and the FDA brings some important issues into sharper focus. The ramifications of this suit will inevitably affect the practice of pharmacy and quality of drug products supplied to the public in addition to the ability of the drug industry to invest in research and development for new drugs.

The specifics of the suit have been very well covered by the trade press. Briefly stated, the PMA suit seeks a judgment declaring the illegality of defendants' overall campaign to foster the use of cheaply priced, lower quality drug products by the American public. Furthermore, it also seeks that the proposed publication of the two documents (The Therapeutic Equivalence List and Guide to Prescription Prices) should be declared unlawful. As you probably know, these documents are slated for release by the FDA and HCFA.

There is no question that the federal government has the power to enact and enforce laws in the best interests of the public. The taxpayers' funds spent by the government agencies are purported to protect the welfare of the consumer. But the questions are—Where does this authority end? Where do we draw the line? Where does the consumer's interest end and the agencies self-serving moves begin?

The federal Food and Drug Administration was created to assure the purity and quality of food and drug products in this country. It is staffed with scientists and bureaucrats. As we gain new knowledge about drugs and diseases, understand the complex biological and physical phenomenon of disease-drug interface, we certainly need more qualified personnel to monitor the use and abuse of drugs in this country. We support the FDA to that extent. Should the FDA limit itself to such scientifically sound pursuits, we have no adverse comments on its organizational scope and functions. However, the real life is different, sadly different.

For the past 15 years, the FDA has taken upon itself functions for which it has had little authority: The pre-clearance of drug promotional materials, the support of one state's formulary and now the publication of the list of therapeutically equivalent drug products. Let's restate one fact once more—FDA should not be in the business of determining the therapeutic equivalency of drug products, just like HCFA should not be the flag bearer for comparative prescription prices.

We are aware that the federal government can exert a lot of influence on the competitive character of an industry because of its huge buying power. Given the contributions of the drug industry to the health and welfare of this nation—indeed most of the world—we believe that it deserves a better deal from the government.

As we have said many times before, the attorneys will argue and the judges will rule on the accuracy, validity and reliability of the data published in these reports, but we can't help wonder about the fine line that divides the public's welfare from bureaucratic proliferation. We hope that the judges direct the federal agencies to concentrate their efforts on their assigned tasks and not create new ones just to increase their budgets or remain in business.

—ACTION IN PHARMACY, January 1979.

Rx: 'Brand Necessary'

In spite of strong opposition from the Indiana State Medical Association, Indiana Board of Pharmacy Regulation 20 was adopted in November. It implemented the Maximum Allowable Cost program (Title XIX) of the Federal Social Security Act.

Regulation 20 not only allows but requires substitution of cheaper generic products when pharmacists fill prescriptions for patients who qualify for reimbursement under the Medicaid program.

In the interest of the patient's welfare, ISMA urges physicians to bear in mind that writing "medically necessary" or "brand necessary" on prescriptions will assure that the patient will be given the exact medicine prescribed. The Association also reminds physicians that, under the Maximum Allowable Cost program, the full cost of prescriptions specified by physicians as medically or brand necessary is reimbursable.

Who Really Assures Prescription Drug Quality?

THE GOVERNMENT has stated on regular occasions that it enforces a single standard of quality for all medicines sold in the country. The federal Food and Drug Administration states that it regularly inspects all drug processing plants to be sure they meet strict standards. They say they find no evidence of widespread differences in drug quality.

There are more than 800 pharmaceutical manufacturers in this country alone producing at least a million batches of drug products each year. In addition, prescription drugs made by foreign manufacturers are imported and consumed by the American public every year.

In the FDA's laboratory analysis of drug products examined in fiscal year 1977, 70% of the analyses showed the drugs to be in compliance with FDA regulations. In 30% of the analyses, the medicines were not in compliance (FDA Quarterly Activities Report, fourth quarter, fiscal year 1977).

Despite all the important roles that the FDA rightfully plays in safeguarding the public's health, simply can't be everywhere, all the time. With more than 80 manufacturers turning out a very large volume of drugs, occasional on-site inspections of facilities can not assure uniform excellence in all the products produced.

In one recent study of the FDA's own statistics (FDA Enforcement Activities Within the Pharmaceutical Industry: Analysis of Relative Incidence, June 1, 1978) Eli Lilly and Company found that prescription drug recalls—because of various defects—are seven times more likely for products of manufacturers with little research expenditures than for companies with sizable research efforts.

In 1977 more than 15 million defective units of medicine were recalled from manufacturers with little research expenditures, while less than one million defective units were recalled from research-intensive companies, which supply three quarters of the total prescription drug market.

The data also showed that medicines produced by firms not heavily engaged in research had 43 times more FDA-initiated court actions against them.

The drug manufacturer, not the government, ensures the safety and effectiveness of this country's prescription medicines.

Only the manufacturer has total control over a medicine, from its discovery in the laboratory, to clinical trials, and on to production, packaging and marketing. Each step along the way contributes to the total quality of a medicine. Quality, then, is measured by the extent of a firm's commitment to making a product in the best way possible—not the cheapest way possible.

—Health Highlights®, Eli Lilly and Company, Indianapolis, November 1978

ISMA Policy: Drug Substitution

The House of Delegates, October 1976, took the position that generic substitution of prescribed drugs may result in a patient receiving a drug which although chemically equivalent, is not therapeutically equivalent, and so opposed any generic substitution for prescribed drugs done at the discretion of the pharmacist.

Legislation dealing with generic drug substitution, introduced during this year's General Assembly meeting, is opposed by the ISMA. Indiana legislators have therefore been urged by the Association not to allow the illusionary cost savings for generic drugs to lower the high quality of medical care presently being received by all Hoosiers.

2 NEW ISMA sponsored insurance plans available to you

Two new essential insurance plans have been added to broaden the range of ISMA sponsored plans. An In-Hospital Protection Plan and a Medicare Supplement Plan brings the total number of supplemental insurance plans to six that are available to eligible member physicians and professional corporations.

NEW PLANS:

IN-HOSPITAL PROTECTION PLAN provides cash benefits of $20 thru $100 per day (when accidental injury or sickness causes hospital confinement). Benefits are payable directly to you, the insured member, and commence the very first day of covered hospitalization. Intensive care and convalescent home benefits included. Spouses and eligible dependent children may be included. Benefits reduce at age 65.

MEDICARE SUPPLEMENT PLAN provides "gap filler" benefits so essential today. Medicare revised their benefits effective January 1, 1979 and these ISMA sponsored plans have been revised to update these changes, supplementing both Medicare Part A and Part B.

OTHER INSURANCE PLANS AVAILABLE:

- **INCOME PROTECTION PLAN** provides an income of up to $2,000 monthly if you are disabled and unable to work due to a covered accident or illness.
- **EXCESS MAJOR MEDICAL PLAN** provides coverage after your present plan is exhausted. Up to $500,000 coverage with a $20,000 deductible. Unlimited surgical schedule and includes extended care and nursing home benefit.
- **OVERHEAD EXPENSE PLAN** provides needed dollars to help you pay off overhead expenses (employees' salaries, rent, utilities, property taxes, etc.) in the event of your covered disability. When disability strikes—your business overhead expenses keep right on going—even when you can't.
- **FAMILY INSURANCE PLAN** provides benefits up to $100,000 in the event of your death.

Underwritten by Continental Casualty Co. and Valley Forge Life Insurance Co., Chicago, Illinois

COUPON

For information on the ISMA sponsored plans including costs, terminations, exclusions, etc.

☐ In-Hospital Protection Plan
☐ Medicare Supplement Plans
☐ Income Protection Plan
☐ Excess Major Medical Plan
☐ Overhead Expense Plan
☐ Family Insurance Plan
☐ Professional Corporation

Dr._____

Street_____

City_____ Zip_____

Administered by



j. russell townsend and associates

Mail to:
Indiana State Medical Association
3935 North Meridian Street
Indianapolis, Indiana 46208

FUTURE FILE

Medicine's Legal Pitfalls

The American Society of Law & Medicine will sponsor a day-long seminar April 19 to explore the legal problems and pitfalls commonly encountered in various medical specialties. The seminar will be held in the Peoria Hilton Hotel, Peoria, Ill. It will be co-sponsored by the Illinois State Medical Society, the Illinois Institute for Continuing Legal Education, the St. Francis Hospital-Medical Center and the Methodist Medical Center of Illinois.

AMA Category 1 credit will be available to participants. The registration fee, including lunch, is $50. Contact the American Society of Law & Medicine, 454 Brookline Ave., Boston, Mass. 02215.

Genetics and the Law

"Genetics and the Law" will be the subject of the second National Conference on Genetics and the Law, to be held May 21-23 at the Copley Plaza Hotel, Boston. Six major sessions will be held, each lasting half a day. They include Government Control of Science; Genetic Counseling and Screening; Ethics, Eugenics and the Law and Society; Legal Control of Genetic Disease; Genetics and Family Law; and Genetics, Law and Environmental Mutagens/Teratogens.

Registration fee is $50. For information write Aubrey Milunsky, M.D., 200 Trapelo Road, Waltham, Mass. 02154, tel: (617) 893-4909.

Calendar of Events

Mar. 4—Board of Trustees
Mar. 7—Commission on Constitution and Bylaws
Mar. 18—Commission on Public Relations
Mar. 28—Executive Committee
Apr. 1—Section on Medical Directors & Staff Physicians of Nursing Facilities
Apr. 15—Easter Sunday
Apr. 21-22—Third District, Clarksville
Apr. 23-25—Washington Visit (Leadership)
May 2—Sixth District, Rushville
May 6—Board of Trustees
May 9—Fourth District, Columbus
May 13—Mothers Day
May 16—I.U. Alumni Day
May 17—First District, Evansville
May 20—Commission on Medical Education
May 20—Subcommission on Accreditation
May 20—Commission on Public Relations
May 23—Seventh District, Martinsville
May 28—Memorial Day
May 30—Fifth District, Terre Haute

Otolaryngology Course

The Indiana Academy of Family Physicians and th Fort Wayne Society of Otolaryngology will sponsor a Otolaryngology course for the primary care physicia March 14 at the Hospitality Inn in Fort Wayne. Th program is acceptable for six AAFP-prescribed hour and for six AMA Category 1 credit hours.

To register, contact the Indiana Academy of Famil Physicians, 4847 S. High School Road, Indianapoli 46241. Tel: (317) 856-3757.

Medical Writers Invited

A day-long workshop dealing with medical com munication will be conducted at the I.U. Medical Cen ter April 28. It is sponsored by the American Medica Writers Association and the I.U. School of Medicine and is open to all physicians interested in sharpenin their skills in writing for publication.

Workshops will be offered in medical writing style statistics, graphics, patient communication/educatior and freelancing. They will meet the criteria for Cate gory 2 AMA credit.

For reservations, which must be made by April 14 contact the American Medical Writers Association 2346 S. Lynhurst Dr., Suite E201, Indianapolis, Inc 46241.

Postgrad Radiology Course

The Department of Radiology, Duke Universit Medical Center, will present a six-day postgraduat course at Atlantic Beach, N.C., July 30-Aug. 4.

Scientific sessions in Diagnostic Radiology will in clude Ultrasound, CT Scanning and Nuclear Medicine The course is accredited for 30 hours of AMA Cate gory 1 credit.

Registration fee is $250. Direct inquiries to Robe McLelland, M. D., Program Director, Radiology, Bo 3808, Duke University Medical Center, Durham N.C. 27710. Tel: (919) 684-4397 or 2711.

Pediatric Pulmonary Conference

A two-day pediatric pulmonary conference, "Lun Injuries and Emergencies," will be conducted at th Marriott Inn, 21st & Shadeland, Indianapolis, Marc 28-29. It will be sponsored by the Department of Ped atrics, Pulmonary Section, Indiana University, th American Lung Association of Indiana and the In diana Thoracic Society.

For more information about the conference, ac credited by the I.U. School of Medicine, contact th American Lung Association, 30 E. Georgia St., In dianapolis 46204.

CONTINUED ON PAGE 16

ESCRIPTION: Methyltestosterone is 17β-Hydroxy-
-Methylandrost-4-en-3-one. **ACTIONS:** Methyltesto-
erone is an oil soluble androgenic hormone.
DICATIONS: In the male: 1. Eunuchoidism and
nichism. 2. Male climacteric symptoms when these are
condary to androgen deficiency. 3. Impotence due to
drogenic deficiency. 4. Post-puberal cryptochidism
th evidence of hypogonadism. Cholestatic hepatitis
th jaundice and altered liver function tests, such as
creased BSP retention, and rises in SGOT levels, have
en reported after Methyltestosterone. These changes
pear to be related to dosage of the drug. Therefore, in
e presence of any changes in liver function tests, drug
ould be discontinued. **PRECAUTIONS:** Prolonged
sage of androgen may result in sodium and fluid
ention. This may present a problem, especially in
tients with compromised cardiac reserve or renal
sease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

FUTURE FILE

CONTINUED FROM PAGE 166

1979 Humanities Seminars

The National Endowment for the Humanities has announced details of its 1979 Summer Humanities Seminars for physicians, nurses and other health care professionals. Each month-long seminar is designed to advance public understanding and use of the humanities by giving professional leaders the chance to stand back from their work and explore issues of national concern under the direction of scholars in the humanities.

Three professional and five inter-professional seminars are offered. From 12 to 15 persons attend each seminar tuition-free, receiving a stipend of up to $1,200, plus reimbursement for travel. Application deadline is April 16.

For information write Professions Program, Fellowships Division MS-101, National Endowment for the Humanities, Washington, D.C. 20506.

Polytomography of the Temporal Bone

The 20th two-day symposium on Polytomography of the Temporal Bone will be conducted at Community Hospital in Indianapolis April 21-22 under the auspices of The Wright Institute of Otology.

This CME activity meets the criteria for 12 credit hours of Category 1 of the AMA's Physician Recognition Award. Fee for the course is $250.

Direct inquiries to The Wright Institute of Otology, Inc., Community Hospital of Indianapolis, 1500 N. Ritter Ave., Indianapolis 46219, or call (317) 353-5679.

Indiana University CME Courses

March 7-8: Current Topics in Internal Medicine;

March 28-29: Pediatric Pulmonary Conference;

April 1-3: Family Practice Review—Part 1;

April 2-4: Cross-Sectional Echocardiography Workshop;

April 18: Arthur B. Richter Child Psychiatry Conference;

April 18-19: Pharmacology Review (Richmond);

April 25: Dermatology for the Primary Care Physician;

May 2-4: Gastrointestinal Radiology;

May 9-10: Electrocardiography;

May 22-24: Family Practice Review—Part 2;

For information, write or call the Indiana University School of Medicine, Division of Postgraduate Medical Education, 1100 W. Michigan St., Indianapolis 46202. Tel: (317) 264-8353.

Tenuate® Ⓒ
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.
PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
ADVERSE REACTIONS: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

Whether overweight is a complicating factor... or just uncomplicated overweight.

Tenuate® Dospan® ℂ℣
(diethylpropion hydrochloride NF)
75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

Merrell

For prescribing information see opposite page.











The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).

© 1978 The Upjohn Company













Motrin 400 mg TABLETS
ibuprofen, Upjohn

The confidence that comes from experience—one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

The confidence that comes from experience—
one more reason to prescribe

Motrin 400 mg TABLETS
ibuprofen, Upjohn

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin, use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin*: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%, *3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

How Supplied

Motrin Tablets, 300 mg (white)	
Bottles of 60	NDC 0009-0733-01
Bottles of 500	NDC 0009-0733-02
Motrin Tablets, 400 mg (orange)	
Bottles of 60	NDC 0009-0750-01
Bottles of 500	NDC 0009-0750-02
Unit-dose package of 100	NDC 0009-0750-06
Unit of Use bottles of 120	NDC 0009-0750-26

Caution: Federal law prohibits dispensing without prescription.

NIM-3

Upjohn The Upjohn Company
Kalamazoo, Michigan 49001



ALDOMET®
(METHYLDOPA|MSD)
TABLETS: 500 mg, 250 mg, and 125 mg

MSD
MERCK SHARP & DOHME

THE JOURNAL, in cooperation with e Division of Postgraduate and ontinuing Medical Education of the diana University School of Medi- ne, offers its readers a Continuing edical Education program. This is e 15th in a series of CME articles, roduced by the faculty of the hool of Medicine and is supported y a grant from its Division of ostgraduate and Continuing Med- al Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 181.



FACIAL PARALYSIS: Diagnosis and Treatment

LAVERNE B. TUBERGEN, M.D.
RONALD C. HAMAKER, M.D.
Indianapolis

THE AGONIES experienced by the patient afflicted with unilateral facial paralysis are mentally and physically quite distressing. This condition is reflected not only in human expressions of emotion but also in repose. It is understandable that the patient afflicted with this problem develops a strong desire to have it corrected.

Significant functional abnormalities accompany this severe cosmetic deformity. Vision, hearing, eating, taste and speaking may all be adversely affected in individuals with facial paralysis. Prompt implementation of medical, surgical and rehabilitative procedures are necessary because of the severe psychological and physiological problems associated with facial paralysis. The choice of appropriate treatment is dependent upon (1) the etiology of the problem, (2) the severity of the facial nerve degeneration, and (3) the site of the lesion.

The misdiagnosis of facial paralysis is not uncommon; most patients are labeled "Bell's palsy" without having an adequate clinical evaluation. By use of a good carefully recorded history and physical examination the true etiology can be uncovered. Selective nerve function studies can more fully evaluate the integrity of the facial nerve.

This paper will review the anatomy of the facial nerve, the diagnosis of facial nerve deficits, the use of special tests for facial function, and the management of facial nerve damage, which results from a variety of injuries and diseases of this nerve.

. Tubergen is an assistant professor and ef of the Section of Otology, Depart- nt of Otorhinolaryngology, Indiana iversity School of Medicine.

. Hamaker is an associate professor l chief of the Head and Neck Surgery tion, Department of Otorhinolaryn- ogy, Indiana University School of dicine.

ANATOMY OF THE FACIAL NERVE

To evaluate properly any patient with facial paralysis, it is important to understand the anatomy and functional relevancy of the nerve. This knowledge not only will help to determine the site of the lesion, but it may also give a clue to the etiologic factors involved in the paralysis. The facial nerve arises centrally in the brain stem and courses through the temporal bone to exit from the skull at the stylomastoid foramen. It enters the parotid gland and ultimately branches terminally to be distributed to the facial mimicry muscles.

Centrally, the facial nerve contains several nuclei in the upper medulla. Its main motor nucleus receives fibers from the pre-central gyrus of the motor cortex. The nucleus receives ipsilateral and contralateral fibers to innervate the upper face and only contralateral fibers to innervate the lower face. In the medulla just deep to the floor of the fourth ventricle is located the internal genu of the facial nerve, which represents the collective motor fibers to the facial muscles. These fibers are joined beyond the genu by other fiber components which make up the facial nerve, i.e., taste, general sensory, secretomotor (tearing, etc.) fibers.

From the medulla, the facial nerve takes a short course through the posterior cranial fossa in the cerebellopontine angle and enters the internal auditory meatus. In these parts of its course, the facial nerve is accompanied by the vestibulo cochlear nerve. In traversing the temporal bone, the facial nerve courses through the bony facial canal (*Figure 1*). Several features of the nerve in the canal are most relevant. A ganglion, the geniculate, occurs at the level of a second bend, the external genu, in the

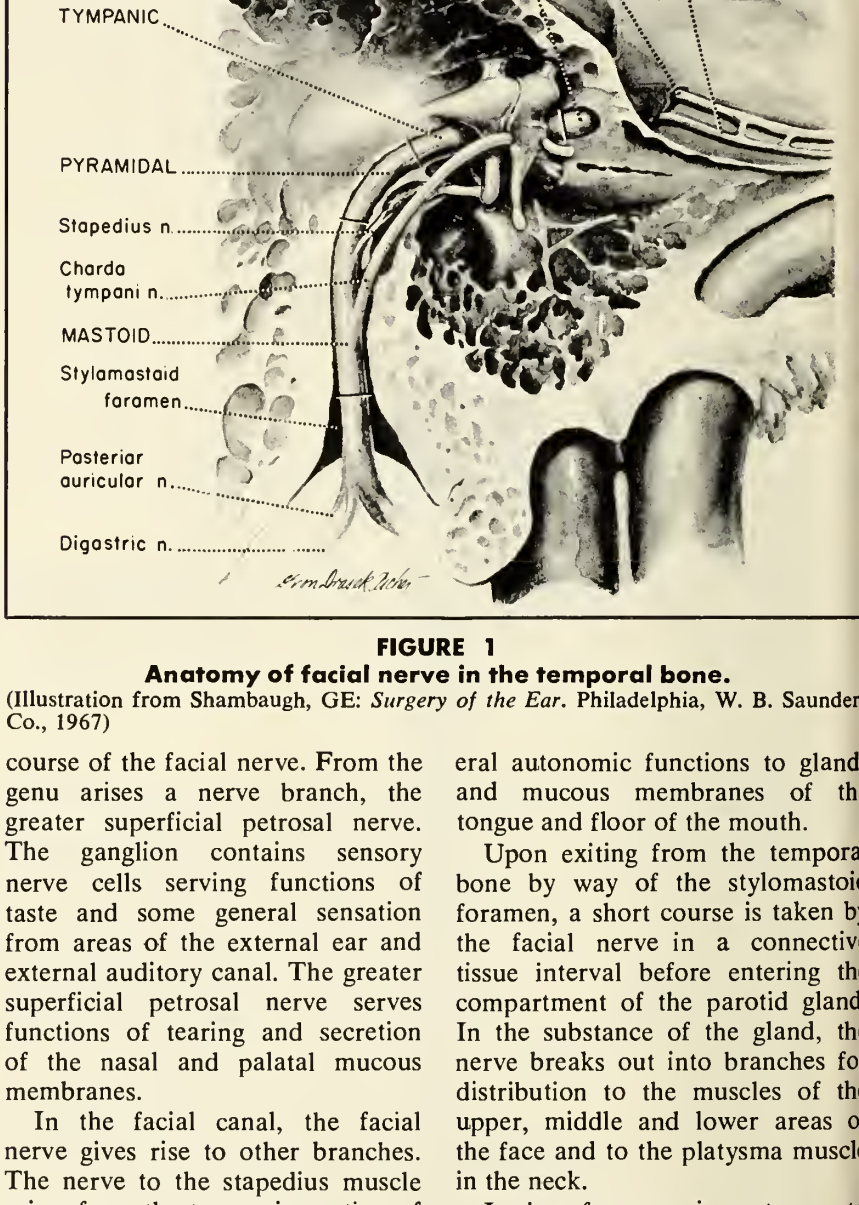


FIGURE 1
Anatomy of facial nerve in the temporal bone.
(Illustration from Shambaugh, GE: *Surgery of the Ear*. Philadelphia, W. B. Saunder Co., 1967)

course of the facial nerve. From the genu arises a nerve branch, the greater superficial petrosal nerve. The ganglion contains sensory nerve cells serving functions of taste and some general sensation from areas of the external ear and external auditory canal. The greater superficial petrosal nerve serves functions of tearing and secretion of the nasal and palatal mucous membranes.

In the facial canal, the facial nerve gives rise to other branches. The nerve to the stapedius muscle arises from the tympanic portion of the facial nerve in the middle ear cavity. The chorda tympani branches at a level where the facial nerve and facial canal are encompassed. Taking part of its course through the middle ear, the chorda tympani serves gustatory, salivary and general autonomic functions to gland and mucous membranes of th tongue and floor of the mouth.

Upon exiting from the tempora bone by way of the stylomastoi foramen, a short course is taken b the facial nerve in a connectiv tissue interval before entering th compartment of the parotid gland In the substance of the gland, th nerve breaks out into branches fo distribution to the muscles of th upper, middle and lower areas o the face and to the platysma muscl in the neck.

It is of some importance t recognize the ease or difficulty wit which the facial nerve can b located outside the skull by use o various landmarks. A most signifi cant and well-recognized landmar is the tympanomastoid sulcus of th skull, bordering between the mas

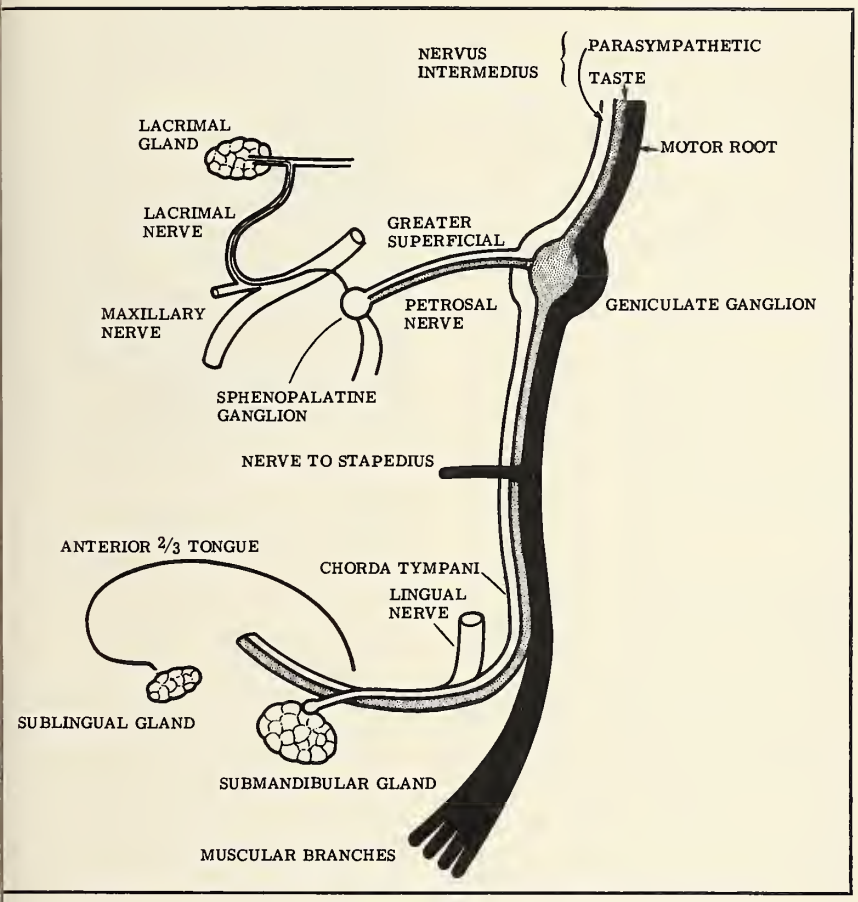


FIGURE 2
Schematic drawing of facial nerve branches.

id process and the tympanic plate the external auditory canal. By ssecting into the tympanomastoid lcus, the facial nerve can be adily isolated just below the lower nit of the sulcus at the level of e exit of the nerve from the ylomastoid foramen. Another ndmark utilized is the posterior lly of the digastric muscle, which in fact innervated by the facial rve. The facial nerve lies at the terior margin of the digastric uscle in a connective tissue in- rval between the mastoid and the rotid gland and before the nerve ters the parotid compartment. In is area as well, a downward pro- ction of the cartilage of the ex- rnal ear canal is often used as a "pointer", directed at the nerve just below this cartilaginous projection.

Many surgeons identify the facial nerve by locating one of its peripheral branches on the face and back-tracing it to the parent nerve in the parotid. Usually a temporal, a buccal, or the marginal mandibular branch is located and dissected proximally into the gland.

SITE OF LESION

Knowledge of the functional anatomy of the facial nerve allows one to determine accurately the sites of lesions which might adversely affect nerve function (*Figure 2*). The facial nucleus receives cortical projections, both ipsilaterally and contralaterally to innervate the muscles of the upper face and only contralaterally to innervate the muscles of the lower face. Thus, a supranuclear central lesion would result in a paralysis of only the lower face, whereas a peripheral paralysis involves both upper and lower facial musculature.

Among other things, the greater superficial petrosal nerve mediates tearing function. Damage to the nerve itself or to the facial nerve proximal to the origin of this nerve produces diminished tearing on the side of the lesion. Tearing function is evaluated by the Schirmer test which uses filter paper to quantitate the flow of tears. A comparison of the involved and uninvolved sides is done of necessity to determine the degree of tearing dysfunction.

The stapedius muscle contracts to stabilize and dampen the movement of the stapes and the ossicular chain when the ears are exposed to excessively loud noises. Contraction of the stapedius muscle is dependent upon the integrity of the facial nerve and particularly upon the motor nerve innervating the stapedius muscle. The muscle contraction can be measured by impedance audiometry. Damage to the facial nerve proximal to the origin of the motor branch of the stapedius muscle results in the absence of stapedius muscle contraction. Subjectively, the patient may experience abnormally reduced pain thresholds to excessively loud noises.

Dysfunction of the chorda tympani nerve results in absence of sensation of taste from the anterior two-thirds of the tongue ipsilaterally. Dysfunction is measured by electrogustrometry or by a simple taste test. In the electrogustrometry test, a galvanic stimulus is applied to the tongue; normally this stimulus produces a metallic taste to the subject. Thresholds are determined

DIAGNOSTIC EVALUATION OF PATIENT

ANATOMICAL LOCATION	FACIAL NERVE BRANCH	END-ORGAN	FUNCTIONAL TEST
INTERNAL AUDITORY CANAL		Vestibular labyrinth Cochlea	Electronystagmography Audiologic Assessment
GENICULATE GANGLION	Greater superficial petrosal nerve	Lacrimal Gland, Nasal mucosa	Radiographic (Tomography) Schirmer test (Tear test)
TYMPANIC	Nerve to Stapedius Muscle	Stapes	Stapedial Reflex
MASTOID	Chorda tympani	Tongue	Taste Test Electrogustometry
EXTRATEMPORAL	Muscle branches	Muscles of facial expression	Facial Movement Electrical Stimulation Test Electroneuronography

FIGURE 3
Diagram of the Facial Nerve Anatomy.

comparing the involved and uninvolved sides. Reduced function indicates pathology of the chorda tympani or of the facial nerve proximal to the junction of the chorda tympani with the facial nerve.

Motor function of the peripheral branches is evaluated by careful physical examination. Forehead and eyebrow movements, eye closure, elevation of the upper lip, flaring of the nasal ala, pursing movements of the lips and lower lip depression are activities which are observed carefully and are accurately recorded as being normal or abnormal.

DEGREE OF DEGENERATION

The completeness of return of function is inversely proportional to the degree of nerve degeneration or denervation. Determination of degree of nerve degeneration is important so that proper treatment can be agreed upon. Basically three testing methods have been used to assess the degree of neuronal degeneration: (1) electrical stimulation test (EST), (2) electromyography (EMG), and (3) electroneuronography (ENoG). Each test has merit and is useful when properly applied, but each has its limitations.[1] Electroneuronography is the newest test and requires more sophisticated testing equipment. It is currently being used at only a few medical centers around the world. In the testing at the Indiana University Medical Center, this procedure appears to be the most sensitive and accurate predictor of permanent facial dysfunction. The muscles are stimulated by galvanic current and ENoG gives a graphic recording of the summated action potentials of the facial muscles of expression. Again, a comparison is done between the involved and uninvolved sides. The reduction in the amplitude of action potential is proportional to the degeneration of the nerve fiber.

The electrical stimulation test (EST) is simple and can be done as a routine test in the office. Its limitation is that it requires a subjective impression of the degree of response. The EST will be normal for the first 72 hours following nerve transection when the nerve is tested by stimulation distal to the site of injury.

Electromyography (EMG) is not routinely used. There may be no demonstrable abnormality until 14 - 21 days following damage to the nerve. Obviously, this time delay in treatment could result in the initiation of permanently irreversible damage.

DIFFERENTIAL DIAGNOSIS

The most common cause of facial paralysis is idiopathic or Bell's palsy. This diagnosis can only be made after a thorough evaluation and no other cause can be identified for the paralysis. Although a complete detailed list of various causes of facial paralysis is beyond the scope of this paper, the causes can be grouped under the following categories: (1) congenital, (2) infection, (3) neoplastic, and (4) trauma. A thorough evaluation of the patient with a suspected facial paralysis is mandatory in order to determine the etiology of the paralysis and to initiate the proper therapy. The underlying pathology can often be uncovered by obtaining a careful history, by performing a thorough physical examination and by conducting special tests which evaluate the nerve or its peripheral branches (*Figure 3*). Special tests include audiometric evaluation, vestibular testing, radiographic evaluation. Careful selection of the site of testing for the nerve lesion must be considered. The historical information relating to the date and rapidity of onset of the paralysis and of the associated symptoms often can give a valuable clue to the location and type of lesion. Particular attention should be given to symptoms relative to the ear. History of otalgia, otorrhea, hearing loss, tinnitus, or vertigo suggests some intratemporal pathology.

The physical examination begins with a complete ear, nose, and throat evaluation. Pneumotoscopy and microscopy are often necessary for the proper diagnosis of any otologic pathology. An adequate assessment of the degree of facial dysfunction not only is important



FIGURE 4
'atient in repose one year ost nerve graft and radical pa- otidectomy for cancer of parot- d gland.

n the determination of the site of esion, but it also aids in the as- essment of the efficacy of a herapeutic regime. Photographs of atients are very helpful and these an eliminate some of the subjec- iveness of evaluation of facial dys- unction. While all of the peripheral ranches of the facial nerve must e evaluated separately and the de- ree of paralysis recorded, particu- ar attention should be given to the unctional integrity of the orbicu- aris oris and the orbicularis oculi nuscles. A unilateral and combined pper and lower facial paralysis is idicative of a peripheral or in- ranuclear nerve lesion, whereas if nly the lower facial muscles are ot functioning, this indicates a cen- rol and supranuclear lesion.

Facial paralysis secondary to a eoplasm in the internal auditory anal is usually seen in combination ith auditory and vestibular dys- unctions. It is for this reason that outine audiometric assessment and NG are incorporated in the work- p. If an assumption is made that patient has Bell's palsy and this ortion of the work-up is omitted, may be catastrophic. The facial aralysis may be the first visible sign of a potentially deadly neoplasm, i.e., acoustic neuroma, meningioma, primary cholesteatoma, or parotid malignancy. Facial paralysis associated with parotid malignancy has an 80 - 90% mortality rate. An occasional situation arises wherein diffuse swelling within the parotid gland gives evidence of facial paralysis. A deep lobe parotid malignancy should be ruled out by means of parotid gland sialography.

Since infection can result in facial paralysis, CBC and SED rates should be included in the work-up. If there is any history suggestive of diabetes, a 5-hour glucose tolerance test may be helpful.

Trauma to the temporal bone or to a peripheral branch of the facial nerve may result in paralysis. Promptness in making a diagnosis is most important. All accident victims should have the facial nerve thoroughly evaluated. Facial paralysis occurring immediately following trauma is an indication for early surgical exploration. A delay at this point may result in irreversible nerve degeneration which might have been avoided through early surgical decompression. Occasionally a situation develops in which there is swelling to such a degree that one is placed in a position of inability to evaluate the facial function. In evaluating the integrity of the facial nerve, one should look at the nasal ala for that small degree of flaring on inspiration.

Radiological evaluation of the facial nerve is best accomplished with thin section tomography of the entire facial nerve. This will not only demonstrate a primary facial nerve tumor, but may show the diagnosis of any acute or chronic inflammatory process of the middle ear or mastoid. Testing for lesions should include Schirmer test (tear test), stapedial reflex test, and electrical testing, which have been discussed earlier in this paper.



FIGURE 5
Same patient as in Figure 4 with movement from nerve graft on left.

TREATMENT

As with the management of many diseases, the choice of treatment of facial paralysis is surrounded with controversy. In general, the treatment will depend upon the etiology of the condition and upon the degree of denervation of the nerve. The work-up should have identified the specific pathologic processes involved. There is, however, little controversy over the mode of management of traumatic injury to the facial nerve, which results from either a peripheral laceration or from a fracture of the temporal bone. These facial paralyses are usually immediate if the nerve is transected. Obviously, in this situation the treatment should involve prompt exploration and repair of the facial nerve if the medical status of the patient allows for this therapy. The most ideal situation is a repair by direct end-to-end nerve anastamosis. The next choice of repair is that of making use of a free nerve graft obtained from a nerve within the field of the reconstruction, such as the great auricular nerve, or another cutaneous branch of the cervical nerve plexus.

With fractures of the temporal bone, the use of the various tests for determination of the integrity of the facial nerve, i.e., tearing, taste, etc., will have localized the infratemporal level of injury to the nerve. In these situations, the management should be to decompress the nerve in the facial canal in continuity from a level proximal to the site of injury to the level of exit of the nerve at the stylomastoid foramen.

In cases of iatrogenic facial paralysis, secondary to procedures such as resection of the temporal bone or following parotid gland surgery, in which cases the facial nerve is likely to have been resected also, reconstruction of the nerve should be undertaken primarily by choice of either a free nerve graft or by use of a hypoglossal to facial nerve crossover (*Figures 4,5,6*). Even though many of the patients that undergo this type of resection require a full course of postoperative irradiation, the nerve grafting or the hypoglossal crossover can be expected to give a satisfactory end result.

The hypoglossal to facial nerve crossover is probably the strongest type of innervation to the face, but it suffers from not providing the involuntary facial movements that can be achieved through a facial nerve graft. With it the functional result gives only mass movements of the face without specific segmental facial muscle function. However, the procedure is much less time consuming and does give a satisfactory result in at least 90 - 95% of cases.

The main debate in acute facial paralysis centers around the choice of treatment in the idiopathic type of paralysis (Bell's palsy). It is difficult to make concrete statements regarding the results of any treatment modalities. It is important to recognize that 70 - 80% of patients with complete idiopathic paralysis will undergo a spontaneous return of function which is complete, and that patients with incomplete paralysis have an even better prognosis.[2] It is extremely rare for an individual with incomplete idiopathic facial paralysis not to recover complete facial function.

The focus of attention in the treatment of idiopathic facial paralysis deals with two questions: "Are steroids beneficial?" and "When is surgical decompression indicated?" In a large series reported in 1972, Adour concluded that the use of steroids was beneficial.[3] However, May, using a double blind prospective study, demonstrated that the use of steroids did not specifically alter the rate of spontaneous recovery from idiopathic facial paralysis. May criticized the work of Adour and pointed out several defects in the study, including the fact that Adour's study was retrospective and that the study did not include patients with a poor prognosis. In the May study, patients treated with steroids obtained a rate of spontaneous recovery equal to that in patients treated with Vitamin A.[4]

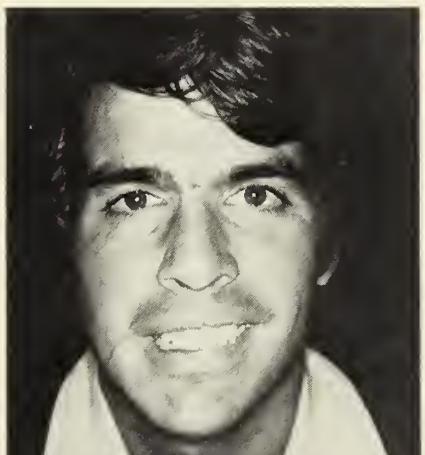


FIGURE 6
Patient with hypoglossal crossover three years post resection of malignant schwannoma of the facial nerve via temporal bone resection on right.

"When is surgical decompression indicated?" Opinions and attitudes vary from surgery not being indicated in idiopathic paralysis, to an attitude that advocates surgery to be done in all cases of facial paralysis. Those who advocate surgical intervention presume that the nerve is undergoing ischemic changes secondary to swelling of the nerve within the bony facial canal. They argue that prevention of further swelling and ischemia would result from decompressing the nerve thereby theoretically preventing any further denervation. The problem is one of selection of those patients who have a poor prognosis for spontaneous recovery. Electrical testing is most helpful, particularly electroneuronography, in determining the degree of damage to the nerve. Fisch has demonstrated that patients with poor electroneuronography response have a poor prognosis for spontaneous recovery and showed that surgical decompression did improve the recovery function of those patients falling into the poor prognosis group.[5] In the Department of Otolaryngology at the Indiana University Medical Center all patients with idiopathic facial paralysis are treated expectantly and no steroids are given. Surgical intervention is proposed only for those few patients who have demonstrated a poor response to electroneuronography testing.

The final type of facial paralysis which must be dealt with is that of a patient who has had a chronic situation either neglected or treated expectantly, but to no avail. In this situation, the face must be rehabilitated after a longstanding facial

paralysis. Again, it may be worthwhile for the patient to undergo a facial nerve decompression in the presence of an idiopathic paralysis of 5 - 10 years duration. If the paralysis results from trauma, the nerve should be re-evaluated for determination of the site of the lesion by means of the Schirmer test, taste, hearing, etc. It is possible that the longstanding paralysis may be secondary to trauma within the temporal bone and that decompression or nerve grafting will allow for at least some return of function. However, injuries to extratemporal segments of the nerve which result from either trauma or iatrogenic causes, or are congenital in origin, require other means of reconstruction. The current trend in rehabilitation of the facial paralysis has been directed toward procedures for true animation of the face and away from classic "static" methods. It is time to do away with the fascial sling or the facelift operation as the means of rehabilitation in the majority of patients.

As reported in an earlier paper,[6] a group of 32 patients was studied who had severe facial paralysis for from 2 - 30 years secondary to viral infection, trauma, cholesteatoma, iatrogenic and congenital causes. Various degrees of nerve and muscle atrophy including end-stage fibrosis were found. This longstanding paralysis situation was not totally irreversible in every patient. By means of electron microscopy, intact axons were still found in a nerve which continued to undergo degeneration for as long as 23 years following facial nerve paralysis. This gave evidence to a subliminal system which is nonfunctional, but which had the potential for rehabilitation. In every case, the facial nerve could be identified surgically and treated with either a hypoglossal to facial nerve crossover or by means of nerve grafting. Essential to rehabilitation in longstanding paralysis is the observation that the mimetic muscle system of the face can survive longer than other muscle systems when deprived of its nerve supply. Muscle atrophy is relative, and obviously the paralysis of long duration will show a greater degree of muscle atrophy. In each case of longstanding paralysis, the posterior belly of the digastric muscle, which is directly innervated by the facial nerve, is present and can be identified and found to have muscle fibers despite its denervation. At the present time facial paralysis of longstanding duration is being treated by means of facial nerve exploration, hypoglossal to facial nerve crossover, and the transplantation of temporalis and masseter muscle slings to key areas of the face, that is, to the eyelids and to the nasolabial area. These are done not as static but as dynamic slings and they give immediate movement in the process of waiting for the return of facial function as a result of the hypoglossal to facial nerve crossover. The muscle itself and not just aponeurosis or fascia is brought to the face for implantation. The muscle transposition delivers trigeminal nerve endings to cross into the dissected areas of facial muscles which in turn have denervated nerves awaiting reinnervation by trigeminal nerve fibers. This, therefore, allows for not only a hypoglossal but a trigeminal nerve reinnervation of the face. Free nerve graft crossovers from the uninvolved side by way of the upper lip to segmental areas of the paralyzed side are also being accomplished as the so-called "cross-face grafting". Microneurovascular anastamosis of free muscle grafts will probably be the ultimate in segmental fashioning techniques for reconstruction of the longstanding paralyzed face. This is a few years away, but will be achieved as microvascular techniques improve so that results can be duplicated at many medical centers.

SUMMARY

The patient who suffers from facial paralysis presents with major physiologic and psychologic problems. It is important that the physician evaluate the patient and rule out the various etiologies prior to treating the patient as an idiopathic "Bell's palsy." Hopefully this review of functional anatomy and of the various testing methods which can be utilized in determining the site of the lesion to the facial nerve will aid the physician in being better able to appraise the situation. The treatment obviously is best indicated at an early stage; this can be accomplished either by good neurologic testing or by surgical rehabilitation. Longstanding paralyses should no longer be permitted to persist without being re-evaluated and without rehabilitation of these patients being considered.

REFERENCES

1. Esslen, E: Electrodiagnosis of facial palsy, Miehlke, A: *Surgery of the Facial Nerve.* 2nd Edition. Verlag, Urban & Schwarzenberg, 1973.
2. Brackmann, DE: Bell's palsy: Incidence, etiology and results of treatment. *Otolaryngologic Clinics of North America* 7: 357-368, 1974.
3. Adour, KK, *et al:* Prednisone treatment for idiopathic facial paralysis (Bell's palsy). *New England J of Med* 287: 1266-1272, 1972.
4. May, M, Wette, R, Harding, W Jr, Sullivan, J: The use of steroids in Bell's palsy: A prospective controlled study. *Laryngoscope* 86: 1111-1122, 1976.
5. Fisch, U: Management of Bell's palsy. Fisch, U: *Facial Nerve Surgery.* Kugler and Aesculapius, 1977.
6. Conley, J, Hamaker, RC, Donnefeld, H: Longstanding facial paralysis rehabilitation. *Laryngoscope* 84: 2155-2162, 1974.

For hemorrhoids and other anorectal conditions



External hemorrhoids



Internal hemorrhoids



Pruritus ani



Proctitis



Anal fissures



Easy to handle, easy to insert, comfortably shaped—Rx only

Easy to apply, nonstaining—Rx only

Prescribe Anusol-HC®

Suppositories/Cream

for symptomatic relief

- Effectively reduces inflammation and edema
- Rapidly relieves pain and itching

ANUSOL-HC® SUPPOSITORIES
Hemorrhoidal Suppositories
ANUSOL-HC® CREAM
Rectal Cream with Hydrocortisone Acetate
CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg, bismuth subgallate, 2.25%, bismuth resorcin compound, 1.75%, benzyl benzoate, 1.2%, Peruvian balsam, 1.8%; zinc oxide, 11.0%, also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg, bismuth subgallate, 22.5 mg, bismuth resorcin compound, 17.5 mg, benzyl benzoate, 12.0 mg, Peruvian balsam, 18.0 mg; zinc oxide, 110.0 mg, also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani.

Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: Anusol-HC® Suppositories and Anusol-HC® Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24); in silver foil strips with Anusol-HC W/C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01); with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F.)

Full information is available on request

Warner/Chilcott
Division, Warner-Lambert Company
Morris Plains, N.J. 07950

AN-GP-91

The professional source of anorectal comfort

CME QUIZ

Facial Paralysis . . .

CONTINUED FROM PAGES 173-179

O OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the orrect answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana University School of Medicine, Division of Postgraduate and Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46202.**

ANSWER THE FOLLOWING TRUE OR FALSE:

1. Long-standing facial paralysis is an irreversible process.
2. Bell's palsy is synonymous with idiopathic facial paralysis.
3. Steroid treatment is the treatment of choice for Bell's palsy.
4. Static slings are the best methods for rehabilitating a patient with facial paralysis.
5. Bell's palsy is the most common type of facial paralysis.
6. In a patient with Bell's palsy a normal Schirmer test implies a lesion distal to the geniculate ganglion.

The following are answers to the CME quiz that appeared in the December 1978 issue of THE JOURNAL. The article upon which the questions were based was "Why Some Infants Fail to Thrive: A Problem With Serious Implications" by Morris Green, M.D.

1. c
2. d
3. b
4. d
5. b

Complete this form to obtain verification for one hour of Category 1 AMA CME credit.

nswer sheet for Quiz: (Facial Paralysis)

. T F
. T F
. T F
4. T F
5. T F
6. T F

Name (please print or type)

Address

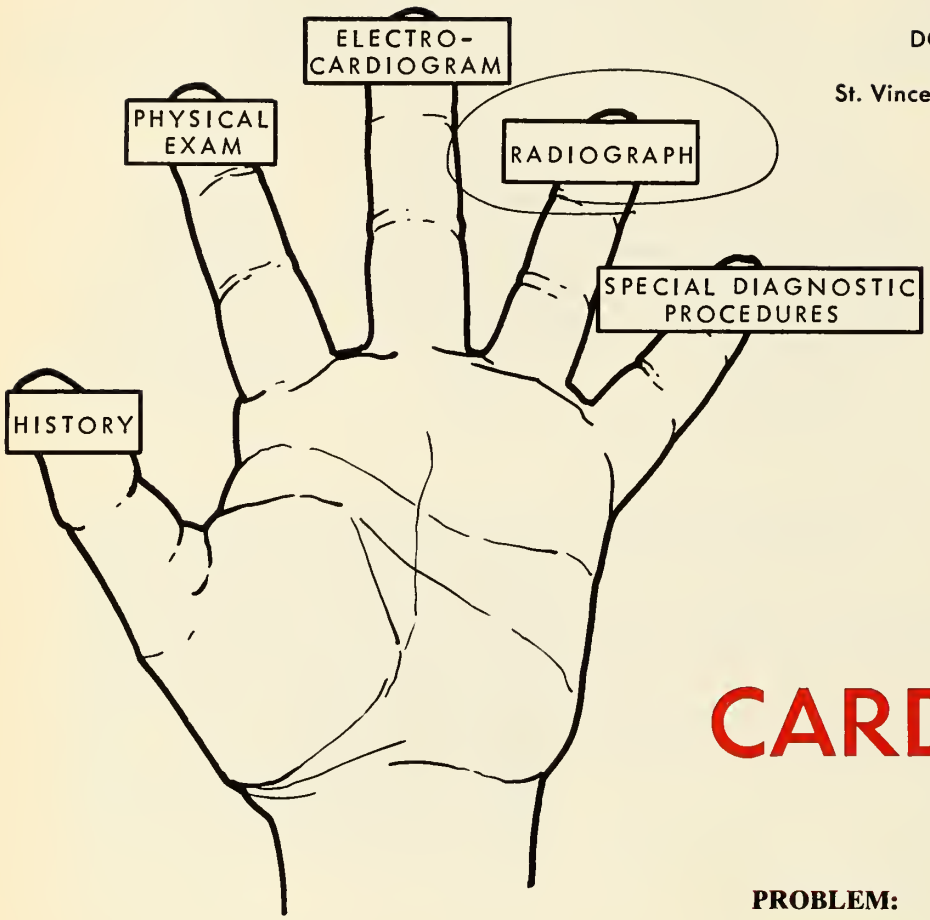
Identification number (found above your name on mailing label)

Signature

wish to apply for one hour of category 1 AMA ontinuing Medical Education credit through the I.U. chool of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, it no cost to me, and that notification of my successful ompletion of the quiz (80% of the questions answered orrectly) will be directed to me for my application for he Physician's Recognition Award of the American Medical Association. I also understand that if I do not nswer 80% of the questions correctly, I will not be dvised of my score but the answers will be published n a later issue of THE JOURNAL for my information.

To be eligible for credit for this month's quiz, send your completed, signed application before May 15, 1979, to the address appearing at the top of this page.

R. JOE NOBLE, M.D.
D. W. SCHWARTEN, M.D.
DONALD A. ROTHBAUM, M.D.
C. C. HALLAM, M.D.
St. Vincent Hospital and Health Care Cent
Indianapolis



THE FIVE FINGERS OF CARDIOLOGY

The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac-diagnosis.

Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.

PROBLEM:

The patient is incapacitated by severe angin pectoris and bilateral calf claudication. In 197 the patient underwent triple vessel coronary by pass grafting at another institution; however, hi angina pectoris recurred post-operatively and re peat cardiac catheterization showed closure o all three bypass grafts and severe left ventricula dysfunction. The patient's claudication progresse to the point where it was his most disabling symp tom.

The femoral pulses were faintly palpable bi laterally, but no popliteal or pedal pulses wer palpable in either leg. The feet were cool wit hair loss and minor ischemic skin changes.

What tests are appropriate to evaluate the pa tient's peripheral vascular occlusive disease What therapy is available to relieve the claudi cation in this high risk patient with severe coro nary artery disease and left ventricular dysfunc tion post unsuccessful coronary artery bypas grafting?

A Self-Assessment

ANSWER:

Aortogram and bilateral femoral arteriograms were performed which demonstrated total occlusion of both superficial femoral arteries at the distal end of the adductor canal (*Figure 1*). Peripheral vascular Doppler studies showed evidence for bilateral occlusive disease below the femoral artery with ankle/brachial flow ratios of 0.78 on the right and 0.64 on the left.

Because of the significant risk of general anethesia in this gentleman and the fact that saphenous veins had been used bilaterally for previous coronary artery bypass grafting, femoral artery dilatation by the percutaneous transluminal angioplasty technique was performed. With this technique, a guidewire and catheter are passed across the occluded segment and an appropriately sized Gruntzig balloon catheter is inflated several times. Post dilatation angiograms showed successful dilatation of the femoral artery (*Figure 2*). Post dilatation Doppler examination showed almost normal ankle/brachial flow ratios of 0.94 on the right and 0.91 on the left.

In summary, by the percutaneous transluminal angioplasty technique, it is often possible to dilate significantly stenosed or occluded arteries at a low risk. Patency rates after dilatation are similar to those of peripheral arterial bypass grafts. The procedure is accomplished with few complications.



FIGURE 1
Right femoral angiogram.



FIGURE 2
Right femoral angiogram post dilatation.

Intracellular Lipid in Pseudohypertrophic Muscular Dystrophy Tissue Culture

CHARLES A. BONSETT, M.D.
ANN RUDMAN, B.S.
ARTHUR Y. ELLIOTT, Ph.D.
Indianapolis

Copyright © 1979, Charles A. Bonsett, M.D.

ABSTRACT

Cells originating from pseudohypertrophic muscular dystrophy tissue differ metabolically from those of normal origin in their propensity for intracellular fat droplet production. This microscopically visible phenomenon is demonstrable in biopsy material used for tissue culture explant source and in the outgrowth from that explant. The use of a culture medium low in lipid precursors, from which the explant has been removed after cellular proliferation has occurred, demonstrates this difference in cellular behavior.

GEIGER AND GARVIN (1957)[5] were the first to grow pseudohypertrophic .muscular dystrophy (PMD) skeletal muscle tissue in culture, following the demonstration of Popogeff and Murray in 1946[11] that normal human skeletal muscle could be grown in vitro. Subsequently Hermann *et al*[7], and others [1,2,3,6,8,9,10,12,13] have added their varied experiences to this area of investigation. The present paper is concerned with the production of intracellular fat droplets in cells originating from PMD skeletal muscle explants as compared to those originating from normal human skeletal muscle.

From the Indiana Neuromuscular Research Laboratory, Old Pathology Building, Central State Hospital, 3000 W. Washington St., Indianapolis 46222.

This study was supported by a grant from the Marion County Muscular Dystrophy Foundation, a United Way agency of Indianapolis.

Although intracellular fat in cultured dystrophic cells has been noted before, neither its importance as an investigative tool, nor its metabolic distinction in contrast to the behavior of cells from normal skeletal muscle in culture has heretofore been recognized.

MATERIALS, METHODS

Dystrophic skeletal muscle for this study was obtained from patients whose clinical features indicated a diagnosis of PMD. These patients were hospitalized for muscle biopsy and other diagnostic procedures. All cases for this study had biopsies showing changes of muscular dystrophy. In addition, all had elevated serum creatine phosphokinase (CPK) values and decreased urine creatinine and increased urine creatine values.

Normal controls for comparison were obtained at surgery from patients free of neuromuscular or endocrine disease. We have used skeletal muscle from a variety sites, both from normal and fro dystrophic patients, and have n found the site, sex, nor the age the patient to be important co siderations for the phenomenon d scribed herein. Diabetic patien were avoided as control source since such explant material ma produce intracellular fat mo readily than non-diabetic skelet muscle.

Biopsy or surgical samples of a proximately 1 cubic centimeter we obtained for tissue culture. The were placed in a pool of steri medium consisting of F-12 (Ham Nutrient Mixture F-12, GIBC Grand Island, N.Y.) with 20% fet bovine serum, Rehatuin (Rehe Chemical Co., Kankakee, Ill.), 10% tryptose phosphate broth, penicill (100 I. U. per ml.) and streptomy cin (100 micrograms per ml.). Th was designated as comple medium-20. In the laboratory a visible adipose or fibrous tissue wa trimmed away from the biops

mple, which was then cut into ces of approximately 1 cubic llimeter. Twenty to 30 such fragents were then placed in 25 cm.^{2} Falcon flasks, to which the complete medium-20 was added. The flasks were then incubated without disturbance for five days at 37° centigrade. Growth was present at the end of this time. The cultures were then changed twice a week with fresh complete medium, in which the 20% fetal bovine serum was replaced with 10% fetal bovine serum (complete medium-10).

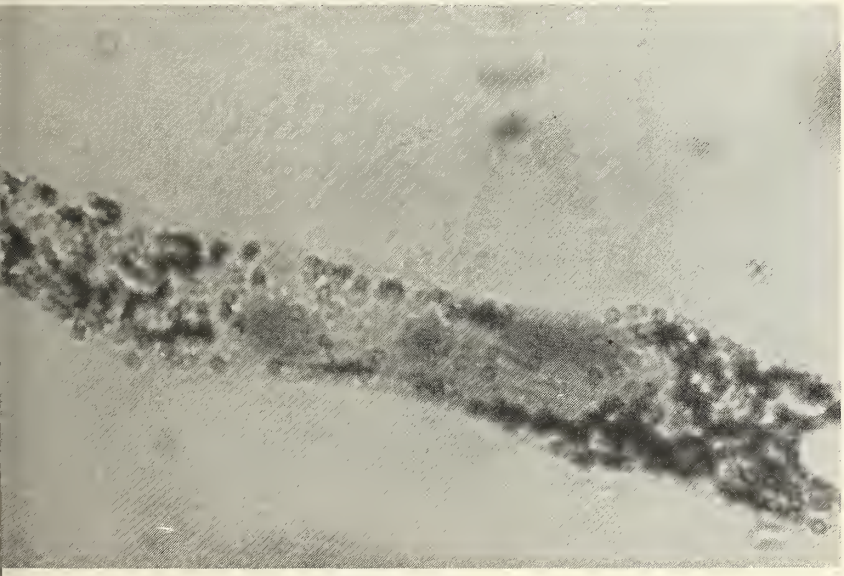


FIGURE 1

ltinucleated cell (probable myosite) from pseudohypertrophic uscular dystrophy skeletal muscle explant after three days on aintenance media containing 2% fetal bovine serum. Note the racellular fat droplets (oil red O x 400).

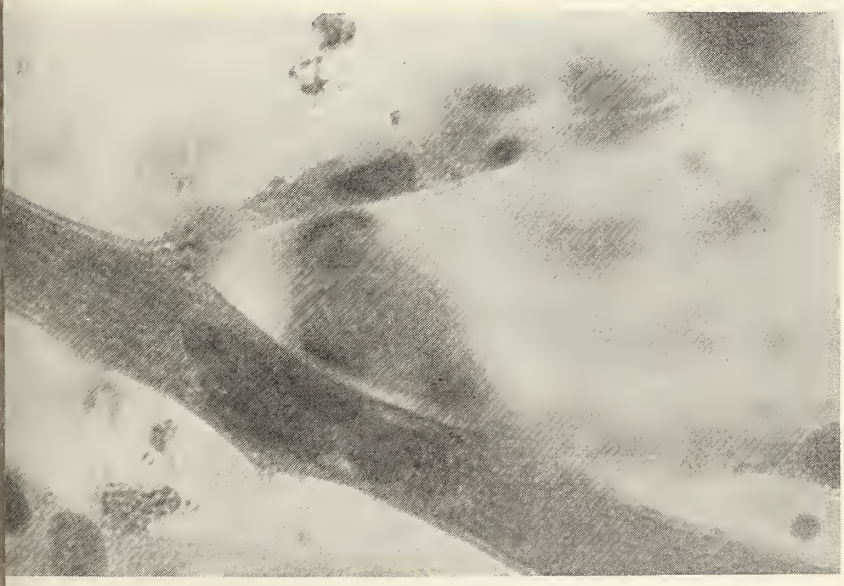


FIGURE 2

ltinucleated cell (probable myosite) from normal human skeletal uscle explant after three days on maintenance media containing % fetal bovine serum. Cytoplasm shows no evident fat (oil red x 400).

The explant attachment to the Falcon flask was tenuous, so that with each exchange of medium some loss of explant material occurred.

All explant material remaining in the flasks at the completion of the complete medium-10 phase was removed before the exchange with the maintenance medium. This final solution consisted of Eagle's minimum essential medium with Earl's salts and glutamine (GIBCO, Grand Island, N.Y.) with 2% fetal bovine serum to which streptomycin (100 micrograms per ml.) and penicillin (100 I. U. per ml.) were added.

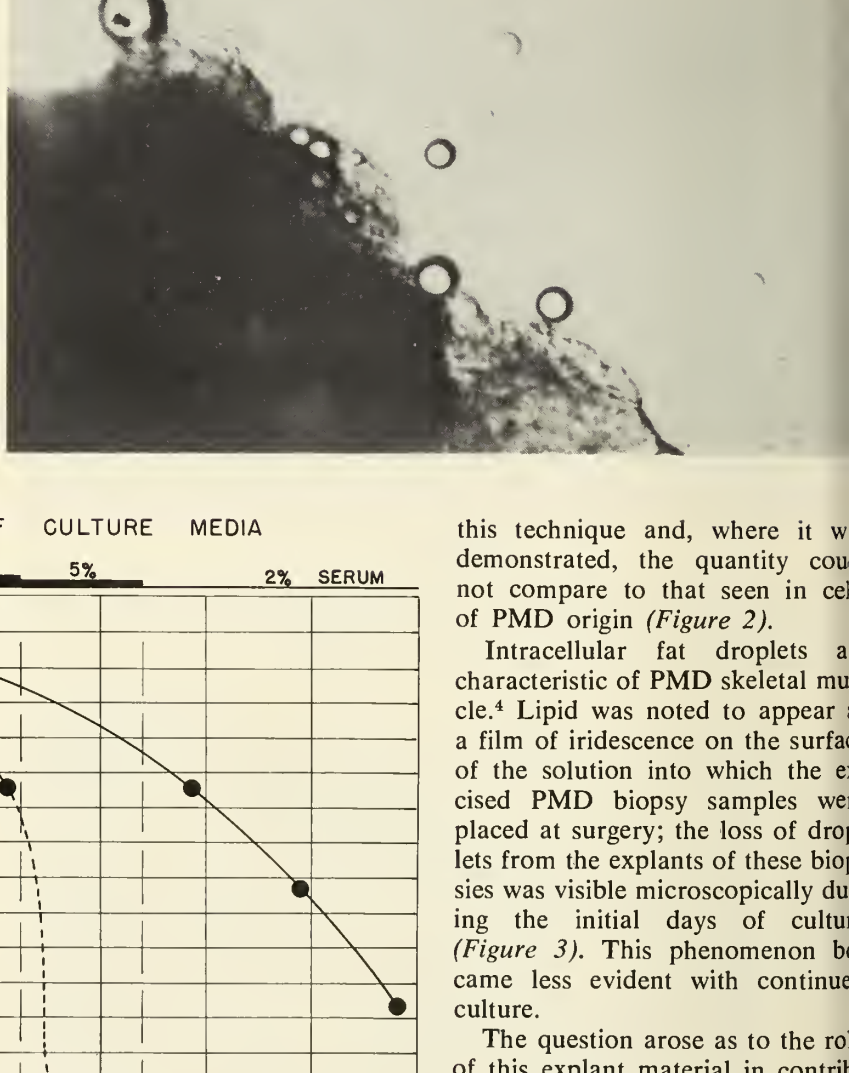
Dense new growth remained in the flasks only at the commencement of this final phase.

The nutrition afforded by this medium was sufficient to maintain the cells in a healthy state. The rate of cell doubling was sharply diminished. Transfer to the maintenance medium was achieved by the third week, and three days on the maintenance medium were sufficient to demonstrate a quantitative difference in intracellular fat production between the PMD and the normal skeletal muscle cells. The cells were then fixed in formalin for subsequent fat staining (oil red O).

RESULTS

Intracellular fat was a conspicuous feature in cultures of PMD muscle *(Figure 1)*. Cells produced from the normal cultures also produced intracellular lipid droplets, if their environment was conducive for this to occur. Usually, however, there was little or none found with

FIGURE 3
Edge of PMD explant during initial period of incubation. Note fat droplets escaping into the environment. This phenomenon is readily demonstrated during the first few days of culture on medium containing 20% fetal bovine serum. It is less impressive after the medium has been exchanged. (Living muscle x 100).



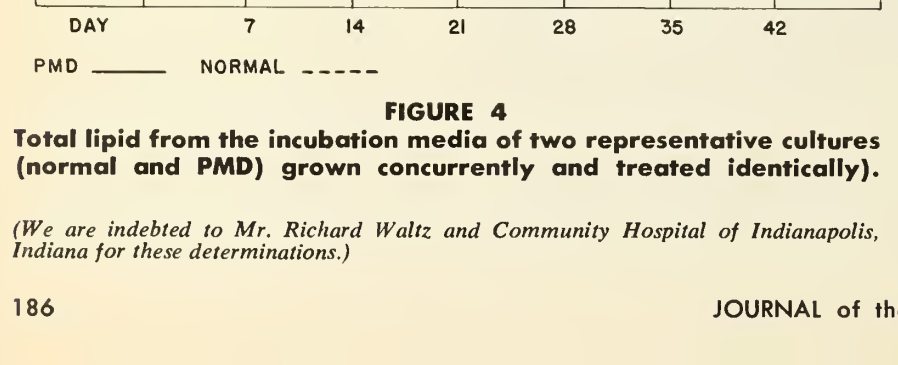


FIGURE 4
Total lipid from the incubation media of two representative cultures (normal and PMD) grown concurrently and treated identically).

(We are indebted to Mr. Richard Waltz and Community Hospital of Indianapolis, Indiana for these determinations.)

this technique and, where it w demonstrated, the quantity cou not compare to that seen in cel of PMD origin *(Figure 2)*.

Intracellular fat droplets a characteristic of PMD skeletal mu cle.[4] Lipid was noted to appear a film of iridescence on the surfac of the solution into which the e cised PMD biopsy samples we placed at surgery; the loss of drop lets from the explants of these biop sies was visible microscopically du ing the initial days of cultu *(Figure 3)*. This phenomenon be came less evident with continue culture.

The question arose as to the ro of this explant material in contrib uting to the intracellular fat of th new growth. Removal of the ex plants eliminated this possibl source of fat to the environmen The new growth continued to pro duce intracellular fat in the dystro phic cultures. Intracellular fat coul still be demonstrated in dystrophi cultures, whose incubation time o the 2% medium was extended fo 40 days.

Transferring filtered (.45 Millire) solution from normal cules after three days on the 2% aintenance medium to another ntical normal culture produced evidence of intracellular fat after additional seven days of incuban. The same procedure, using dia from dystrophic cultures to rmal cultures, caused intracellu- fat to appear in the normal ls.

Figure 4 compares the amount fat in the discarded media from resentative examples of normal d dystrophic cultures in continus incubation with progressive rection of the amount of fetal vine serum. Note that a brief riod on 5% fetal bovine serum is luded in these data.

A more difficult question, not swered in the present paper, was ether all cell types present in the ture were manifesting intracellu- fat, as a result of a metabolic or common to all (since most ls present demonstrated intracelar fat); or, whether they were agocytizing the lipid product of e or more cell types present. Cell es other than skeletal muscle lood cells, epithelial cells, fibroes, fat cells, and possibly smooth scle cells) also were present in explant, and possibly present in outgrowth.

SCUSSION

The present tissue culture experice demonstrates that cells origiing from PMD explants have a pensity for the production of racellular fat, that when these ls are separated from their ext source and maintained in a ic nutritional environment, i.e., e that will not produce micropically visible fat in cells derived m normal human skeletal muscle, y will continue to produce incellular fat.

This indicates that one or more of the various cell types present in the culture is metabolically different from its corresponding cell type or types in the normal culture.

Clinical experience and the experience gained by studying the pathology of this disease demonstrates that skeletal muscle degenerates, and adipose tissue and fibrous tissue proliferate. This suggests the probability that skeletal muscle is the abnormal tissue.

It may well be in this disease that the skeletal muscle only possesses the metabolic abnormality, and that the remaining cells show intracellular fat entirely on the basis of phagocytosis of this product of abnormal metabolism, and that this accounts for or contributes to the proliferation of fat and fibrous tissue. On the other hand, it may be that cells in addition to or other than skeletal muscle cells have the inherent metabolic defect.

The importance of the phenomenon described in this paper is that a metabolic difference is demonstrated between cells originating from normal skeletal muscle and those originating from PMD skeletal muscle. This metabolic difference is not dependent upon a trophic relationship with an intact motor innervation, but rather is an abnormality that is demonstrated in the parent tissue and is transmitted to the progeny of that tissue.

This tissue culture experience shows intracellular fat to be produced in cells from PMD skeletal muscle under environmental conditions that do not allow fat to appear in normal cells, suggesting that a fat pathway is being "turned on" abnormally in this disease.

REFERENCES

1. Askanas V, Engel WK: A new program for investigating adults' human skeletal muscle grown aneurilly in tissue culture. *Neurol,* 25: 58-67, 1975.
2. Bateson RG, Hindle D, Warren J: Growth pattern in vitro of normal and diseased adult human skeletal muscle. *J. Neurol Sc,* 15: 183-191, 1972.
3. Bishop A, Gallup B, Skeate Y, Dubowitz V: Morphological studies on normal and diseased human muscle in culture. *J. Neurol* Sc, 13: 33-350, 1971.
4. Bonsett CA: *Studies of Pseudohypertrophic Muscular Dystrophy.* Charles C. Thomas. Springfield, 1969.
5. Geiger RS, Garvin JS: Pattern of regeneration of muscle from progressive muscular dystrophy patients cultivated in vitro as compared to normal human skeletal muscle. *J. Neuropath and Exper Neurol,* 16: 532-543, 1957.
6. Goyle S, Karla S, Singh: The growth of normal and dystrophic human skeletal muscle in tissue culture. *Neurol (Bombay),* 15: 149-151, 1967.
7. Hermann H, Konigsberg UR, Robinson G: Observations and culture in vitro of normal and dystrophic muscle tissue. *Proceedings Society Experimental Biology and Medicine,* 105: 217-221, 1960.
8. Kakulas BA, Papadimitriou JM, Knight MP, Mastaglia FL: Normal and abnormal human muscle in tissue culture. *Proc Aust Assoc Neurol,* 5: 79-85, 1968.
9. O'Steen WK: The growth of human dystrophic skeletal muscle in diffusion chambers. *Texas Reports Biological Medicine,* 21: 369-379, 1963.
10. Pierce GW: Tissue culture in the study of muscular dystrophy. In Bourne GH, Golarz MN (editors): *Muscular Dystrophy in Man and Animals,* Karger, Basle, 1963, pp 177-191.
11. Popogeff IA, Murray MR: Form and behavior of adult mammalian skeletal muscle in vitro. *Anatomical Record,* 95: 321, 1946.
12. Thompson EJ, Yasin R, Van Beers G, Nurse K, Ali-Ani S: Myogenic defect in human muscular dystrophy. *Nature,* 268: 241-243, 1977.
13. Witkowski JA, Dubowitz V: Growth of diseased human muscle in combined culture with normal mouse embryonic spinal cord. *J. Neurol Sc (Amst),* 26: 203-220, 1975.

Court Action

Physician-Medicare Providers

The Florida Medical Association, the Broward County Medical Society, several physicians, and the American Medical Association were granted an ancillary writ of injunction preventing the Secretary of Health, Education and Welfare from disclosing a list of physicians and amounts of income generated from Medicare in 1977. The federal trial court in Florida, which made the ruling, said that it would preserve its jurisdiction over the case pending final determination on the merits.

The plaintiffs argued that physicians had a federally protected right of privacy that barred the disclosure of their names and the amounts of Medicare reimbursement they received. A temporary restraining order was issued by the federal court and it was extended to allow additional physicians and associations to intervene. The temporary restraining order was extended to cover all physicians in Florida and all other physicians in the country who belonged to the American Medical Association and who would be identified in a disclosure of annual Medicare reimbursement amounts.

As the temporary restraining order was about to expire, the trial court issued an ancillary writ of injunction to preserve its jurisdiction over the case pending final determination on the merits. The court said that the physicians would suffer irreparable harm if the injunction were not issued, which far outweighed any possible injury HEW might suffer.—*Florida Medical Association, Inc. v. Department of Health, Education & Welfare, 454 F. Supp. 326 (D.C., Fla., July 11, 1978)*

Editor's Note: On Oct. 6, 1978, a three-judge panel of the federal appellate court in Florida denied the government's motion of summary reversal of the writ of ancillary injunction. The government is now trying to perfect an appeal in the federal appellate court.

Courtesy of THE CITATION, Dec. 1, 1978.

Librax®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

Please consult complete prescribing information, a sur mary of which follows:

Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, beni bladder neck obstruction; hypersensitivity to chlordiazepo HCl and/or clidinium Br.

Warnings: Caution patients about possible combined effe with alcohol and other CNS depressants, and against haza ous occupations requiring complete mental alertness (*e.g.* operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but u caution in administering Librium® (chlordiazepoxide HCl) t known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsio reported following discontinuation of the drug.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.**

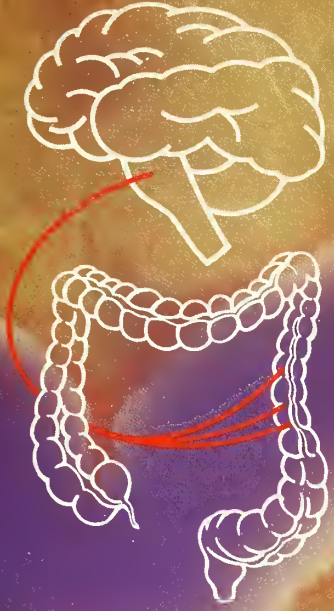
As with all anticholinergics, inhibition of lactation may occu

Precautions: In elderly and debilitated, limit dosage to sm est effective amount to preclude ataxia, oversedation, conf sion (no more than 2 capsules/day initially; increase gradua as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropic seems indicated, carefully consider pharmacology of agen particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions re ported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. Whe chlordiazepoxide HCl is used alone, drowsiness, ataxia, co fusion may occur, especially in elderly and debilitated; avoi able in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope re ported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, gene ally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported wi Librax typical of anticholinergic agents, *i.e.*, dryness of mou blurring of vision, urinary hesitancy, constipation. Constipati has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

Roche Products Inc.
Manati, Puerto Rico 00701



In treating irritable bowel syndrome*

Enhance your therapeutic expectations with

Librax®

Each capsule contains
5 mg chlordiazepoxide HCl
and 2.5 mg clidinium Br

antianxiety/antispasmodic/antimotility

Librax is unique among G.I. medications in providing the specific antianxiety action of LIBRIUM®(chlordiazepoxide HCl) as well as the potent antispasmodic and antimotility actions of QUARZAN®(clidinium Br) for adjunctive therapy of irritable bowel syndrome.

ROCHE

Librax has been evaluated as possibly effective for this indication.
Please see brief summary of prescribing information on preceding page.



EMPIRIN® COMPOUND
with CODEINE

Each tablet contains: aspirin, 227 mg; phenacetin, 162 mg, and caffeine, 32 mg; plus codeine phosphate in one of the following strengths #4—60 mg (gr 1), #3—30 mg (gr ½); #2—15 mg (gr ¼), and #1—7.5 mg (gr ⅛). (Warning—may be habit forming)

C III

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

"FOR THE MONEY, WE DON'T SEE ANYTHING THAT CAN TOUCH IT."

–ROAD AND TRACK, ON THE AUDI 5000



Here are excerpts from ROAD & TRACK Magazine's December, 1977 road test report on the Audi 5000:

"...the 5000 is considerably less expensive than cars it is most similar to: BMW 530i...or the Mercedes-Benz 230...or even the 280E..."

"Our subjective seat-of-the-pants impressions of 5000's handling were borne out by our 700-ft. om test where the car turned in a speed of 3 mph. This is...nearly 4 mph better than the ugeot 604 July, 1977)."

"...damned impressive on the test track and on the d and should have little trouble keeping up with even surpassing other more expensive sedans."

"The ride is comfortable on every surface and re is plenty of wheel travel to allow dips and verts to be taken at speed without upsetting the di's aplomb."

"The optional air conditioning is almost too effective and will blow gobs of truly cold air almost immediately. The heater, too, is quite efficient..."

"The 5000 can double as a comfortable and luxurious family sedan capable of hauling five people for long distances and as a sports sedan that will provide a great deal of driving entertainment. And for the money, we don't see anything that can touch it."

*Why is ROAD & TRACK Magazine impressed with the Audi 5000? Test drive the 1979 edition at your Porsche + Audi dealer and find out why. The Audi 5000 prices start at $9395.**

*Suggested retail price $9395 P.O.E. Transp., local taxes and dealer delivery charges additional. Metallic paint, additional.

PORSCHE+AUDI
Nothing Even Comes Close

See your nearby Audi dealer.

Superior Vena Cava Syndrome Caused by Intrathoracic Goiter

Intrathoracic goiter is a rare cause of superior vena cava syndrome. Three cases are presented and venographic patterns are discussed . . .

ANASTACIO C. NG, M.D.
DAVID L. BROWN, M.D.
SILVIJA D. TAYLOR, M.D.
Indianapolis

INTRATHORACIC GOITER as a cause of superior vena cava syndrome is rare.[1,2] Of the 733 cases of superior vena caval obstruction as reported in the literature since 1949, only nine were caused by benign intrathoracic tumors, of which four were due to intrathoracic goiter.[2] The clinical diagnosis of the superior vena cava syndrome is not usually in doubt, but benign causes including intrathoracic goiter should be kept in mind. We wish to present three cases in which this syndrome was clinically present and in which venous obstruction of varying degree was documented by venography.

MATERIALS AND METHODS

Three patients who were admit ted to Methodist Hospital in 197 with superior vena cava syndrom were studied by bilateral upper ex tremity and superior vena cava ve nography. Their chest films showe superior mediastinal mass.

Fifty cc. of Renografin®-76 were simultaneously injected int both antecubital veins. Followin the injection of 25 cc., filming wa begun at the rate of one frame pe second for 10 seconds.

From the Department of Radiology, Methodist Hospital of Indiana, 1604 N. Capitol Ave., Indianapolis 46202.

The authors thank Miss Bonnie Fields for her secretarial assistance.

*Renografin®-76: diatrizoate meglumin (66%), diatrizoate sodium (10%).

CASE 1: A 51-year-old Negro female, with progressively enlarging mediastinal mass for three years, presented with facial edema. Chest film showed a large superior mediastinal mass, situated anteriorly *(Figure 1-A)*. Venography demonstrated a tapering deformity of the subclavian veins where they cross the first rib to enter the mediastinum. There was delayed clearance of the contrast bilaterally, and opacification of a few collaterals via the cervical venous plexus on the left outlined the cervical extent of the mass. There was gross displacement of the innominate veins laterally by the mass and distortion of the superior vena cava *(Figure 1-B)*.

Cervical exploration of the mediastinum was done, and a cervical goiter was found to extend substernally. The patient was treated medically to shrink the gland, and underwent subsequent thyroidectomy.

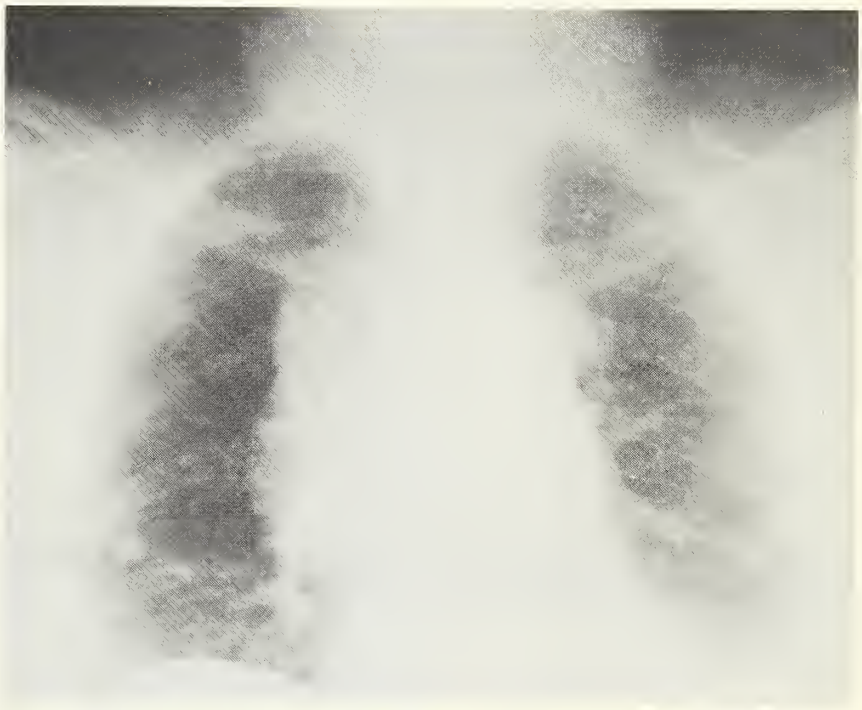


FIGURE 1-A
Frontal chest radiograph showing a large mediastinal mass extending more to the right side.



FIGURE 1-B
Superior vena cavagram showing tapered deformity of both subclavian veins (arrows) at the level of first rib, lateral and inferior displacement of innominate vein and superior vena cava. Cervical venous plexuses on the left are opacified to outline the neck extension of the mass.

CASE 2: A 68-year-old Negro female with a known goiter for many years developed facial edema and cyanosis. Chest film showed a large midline mass with substernal extension *(Figure 2-A)*. Venography demonstrated venous compression and obstruction. There was lateral displacement and bowing of the innominate veins, with the greatest venous compression being at the innominate-subclavian junction. Extensive collaterals were seen, including the lateral thoracic vein and intercostal veins *(Figure 2-B)*. This patient underwent subtotal thyroidectomy, at which time substernal extension of the gland was verified. A postoperative venogram showed marked improvement in flow, with no significant collaterals, and much less inferior displacement of the innominate veins *(Figure 2-C)*.

FIGURE 2-A
Frontal chest radiograph showing a large midline mass with substernal extension.





FIGURE 2-B
Venogram showing laterial displacement and bowing of the innominate veins, with the greatest venous compression at the innominate subclavian junction. There are extensive right venous collaterals via the lateral thoracic, intercostal and cervical venous plexus.

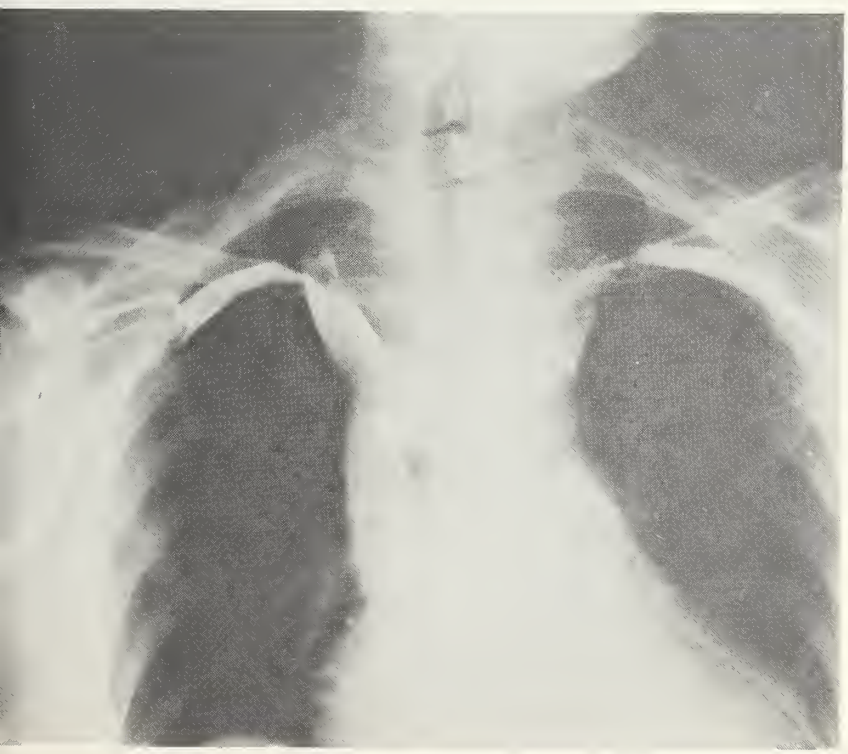


FIGURE 2-C
Postoperative venogram after subtotal thyroidectomy showing marked improvement in flow, less displacement of innominate veins and absent collaterals.

CASE 3: An 82-year-old white female was admitted to the hospital for treatment of acute myocardial infarction. There was a history of intermittent neck vein distention and swelling limited to the upper extremities. An enlarged thyroid was palpable. Chest film showed widening of the superior mediastinum by a large mass compressing the trachea *(Figure 3-A)*. On venography, there was narrowing of the subclavian veins at the thoracic inlet, and lateral and inferior displacement of the innominate veins, with intercostal vein opacification. The patient did not undergo surgery because of her medical condition.

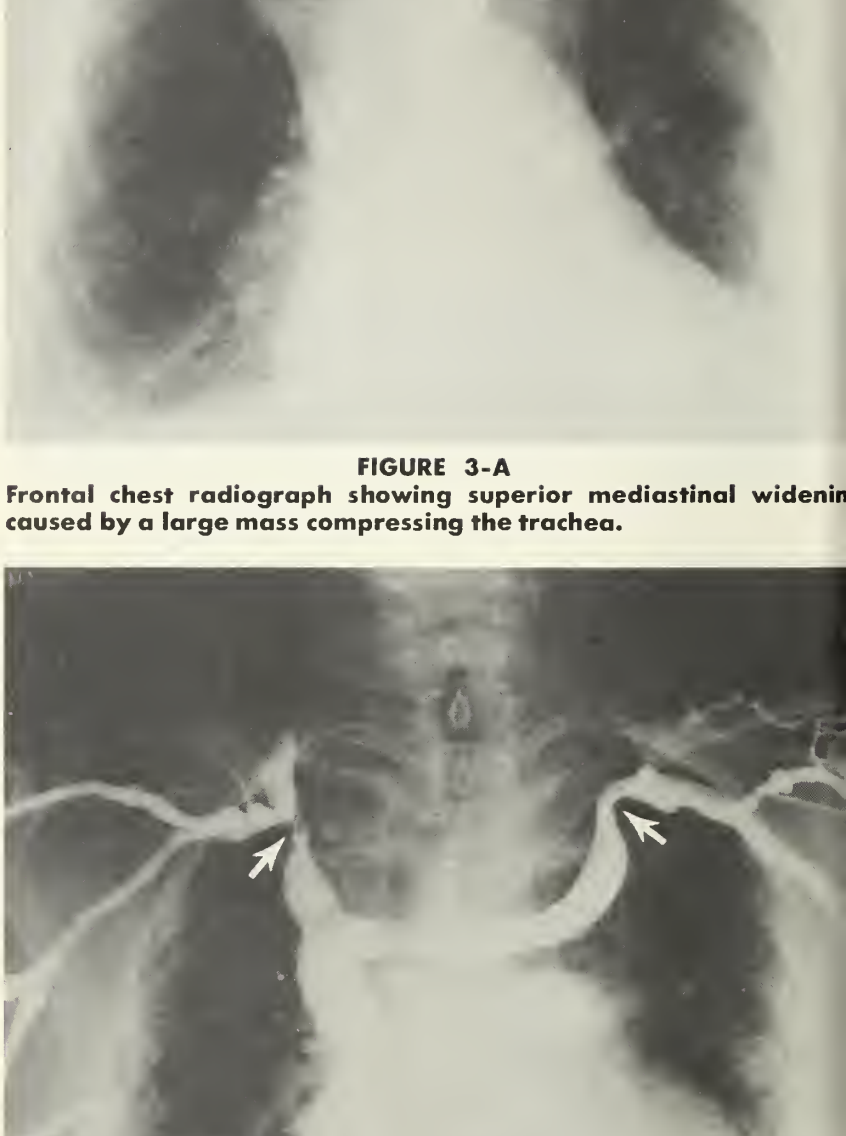


FIGURE 3-A
Frontal chest radiograph showing superior mediastinal widenin caused by a large mass compressing the trachea.

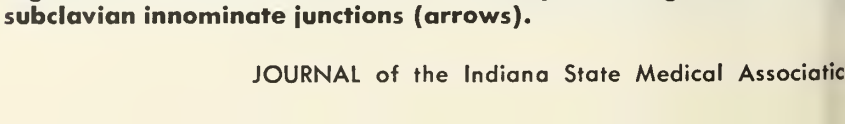


FIGURE 3-B
Venogram showing the characteristic lateral displacement and bow ing of both innominate veins, with compression greatest at th subclavian innominate junctions (arrows).

DISCUSSION

Although most goiters remain confined to the neck, 1-10% extend into the thorax,[3] as the thoracic inlet provides a path of relatively little resistance. Virtually all of these substernal goiters maintain some connection with the thyroid in the neck.[4] Most arise from the lower pole or isthmus of the thyroid and descend anteriorly to the trachea, with a small percentage arising from the posterior aspect of either lobe and descending behind the trachea. As a cervical goiter extends into the mediastinum through the relatively narrow thoracic inlet, it may compress or displace structures passing through the inlet. Maximum compression of the veins might be expected at the subclavian-innominate junction, as the veins cross the first rib to enter the mediastinum.[5] In addition, compression of the innominate veins with lateral displacement may be seen. The relatively fixed position of the aortic arch limits extension toward the left side, so that the bulk of a substernal goiter, as well as the great effect on vascular structures, is on the right. If sufficient inferior extension is present, the superior vena cava may be affected.

With occlusion of the superior vena cava or its major tributaries, collateral venous pathways develop. Collaterals between the superior and inferior vena cava posteriorly are via the azygous system and the vertebral venous plexuses. Anteriorly, communications are established between the internal thoracic veins and lateral thoracic veins, and between the superficial and inferior epigastric veins. Between anterior and posterior aspects, collaterals are via the intercostals, lateral and internal thoracic anastamoses, and lateral thoracic-azygous anastamoses. In the neck, collaterals include the vertebral plexuses, the middle and superior thyroid veins, and the jugular venous arch.[6]

SUMMARY

Intrathoracic goiter characteristically may produce changes on venography of lateral and inferior displacement of the innominate veins and compression of the subclavian-innominate junctions and the development of venous collaterals. Three cases of superior vena cava syndrome due to venous compression by intrathoracic goiter have been presented. This is a rare cause of superior vena cava obstruction but one that must be considered when the clinical picture suggests this syndrome. Nuclear scan is diagnostic of intrathoracic goiter when substernal extension can be demonstrated, and venography provides documentation of the goiter as the cause of superior vena cava syndrome.

REFERENCES

1. McIntire, FT, Sykes, EM, Jr: Obstruction of the superior vena cava: A review of the literature and report of two personal cases. *Ann. Intern. Med.*, 30: 925, 1949.
2. Kamiya, K, Nakata, Y, Naiki, K, Hayashi, H: Superior vena caval syndrome. *Vasc. Dis.*, 4: 59, 1967.
3. McCort, JJ: Intrathoracic goiter. *Radiology*, 53: 227, 1949.
4. Leigh, TF, Weens, HS: *The Mediastinum*. Charles C. Thomas, Publisher, Springfield, Ill., 1959.
5. Byrk, D: Venous compression and obstruction by intrathoracic goiter. *J. Canad. Assoc. Radiol.*, 25: 300, 1974.
6. Okay, NH, Byrk, D: Collateral pathways in occlusion of the superior vena cava and its tributaries. *Radiology*, 92: 1493, June 1969.
7. Effler, DB, Groves, LK: Superior vena caval obstruction. *J. Thorac. & Cardiovasc. Surg.*, 43: 574, 1962.
8. Evans, JT, Vincent, RG, Tahiter, H: Superior vena caval obstruction with substernal thyroid. *Southern Med. J.*, 67: 3, 1974.
9. Silberstein, GE, Burke, G, Goldberg, D, Halko, A: Superior vena caval system obstruction caused by benign endothoracic goiter. *Dis. Chest*, 56: 519, 1969.
10. Sherman, PH, Shahbahrami, F: Mediastinal goiter: Review of ten cases. *Amer. Surgeon*, 32: 137, 1966.

1979 Membership Roster

The 1979 Membership Roster is published as a Supplement to the March issue of The Journal. It is printed from information carried on the computerized Master File of the Indiana State Medical Association.

Additional copies: Send check with order to The Journal, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Ind. 46208. Single copies to members, $5; all others, $15. Checks should be made payable to the Indiana State Medical Association.

Biofeedback in Headache Management: An Evaluation of 56 Patients

GWEN HEATON, B.A.
Louisville, Ky.

ESTIMATES attributing 60 to 80% of illness to stress reflect a growing awareness of its potential danger. Traditionally, medical science has approached stress-related problems with chemotherapy, psychotherapy, or simply an admonishment to relax. A recently developed adjunct to these traditional methods, biofeedback therapy, is being used successfully in the management of such stress-related disorders as headache, insomnia, and essential hypertension.

With biofeedback, a patient receives continual information (feedback) on a physiological process, e.g., muscle tension, so that he can learn control of a maladaptive stress response. This article describes and evaluates the effectiveness of biofeedback techniques as used in a regional clinic for headache management.

Two kinds of biofeedback are used in treating headaches: electromyographic and thermal. In tension headaches, electromyographic feedback is used to teach skeletal muscle relaxation. Migraine headache patients learn to relax smooth muscles, causing peripheral vasodilation, a correlate of autonomic relaxation. This response apparently counteracts the sympathetic overactivation associated with onset of the migraine. As headache patients develop control of aberrant vascular and muscular behavior, they can relieve their headaches.

Requirements for entering the biofeedback program are physician referral and evaluation by the clinic director. Factors that can interfere with the program, such as drug dependence, organic damage and psychological problems, must be considered before accepting a patient. The following procedure is used to teach patients these headache management skills.

PROCEDURE

Patients are seen for an hour of biofeedback training each week for three to four months. Initially, patients learn muscle relaxation using electromyogram (EMG) feedback. In this procedure, frontalis or trapezius tension is converted to a "click" sound. A technician explains to the patient how a decrease in muscle tension correlates with a slower click rate. The feedback tells a patient when he is decreasing muscle tension, giving him a concrete demonstration of his ability to actually control the response causing headaches. Instruction also is given in progressive relaxation, which involves alternately tensing and relaxing muscle groups so the patient learns to recognize degrees of muscle tension and the sensation of relaxation.

After several EMG sessions, vascular headache patients progress to hand temperature training. The signal from a sensitive thermistor attached to a finger is expressed as a tone whose pitch changes as hand temperature changes. The patient is told to increase the pitch, which indicates that hand temperature is increasing. Autogenic phrases, suggesting that various parts of the body feel heavy, warm, and relaxed, also are used to help the patient learn to increase hand temperature.

DISCUSSION

Daily practice of biofeedback relaxation techniques and recording of headache intensity and duration are expected of each patient. These records were used in evaluation of the effectiveness of the program. The 56 patients with sufficient data for evaluation were in three groups: tension headache (16 patients), migraine (22 patients), and other (18 patients).

Patients progress through the program at their own rate. Of the 56 evaluated here, programs ranged from 12 to 20 weeks. An index score reflecting headache intensity and duration was calculated both for the first four weeks and the last four weeks of an individual's program. Only 28 of these patients had enough data for calculation of a drug index. The higher the index score, the more severe the headache or the higher the drug intake.

Ms. Heaton, whose majors are in psychology and physics, manages the Medical-Physics Laboratory, Inc., in Louisville, Ky. Her father, Elton Heaton, M.D. of Madison, is a co-director of the Louisville laboratory, as well as the one in Madison.

Table 1 represents the results of ıtistical evaluation of the data. All ree groups show statistically sig-ficant decreases in headache in-ısity and duration. The average crease for migraine patients was %; 53% for tension; and 31% for ɔse with other kinds of head-hes.

The average decrease in drug in-ke related to headache was 61% r migraine, 32% for tension, and % for other types of headaches. ıe latter two decreases were not ıtistically significant.

Other researchers have achieved en more encouraging results with nilar biofeedback techniques. Of rticular importance are some of e studies started several years ago ıere long-term follow-up data is ailable.

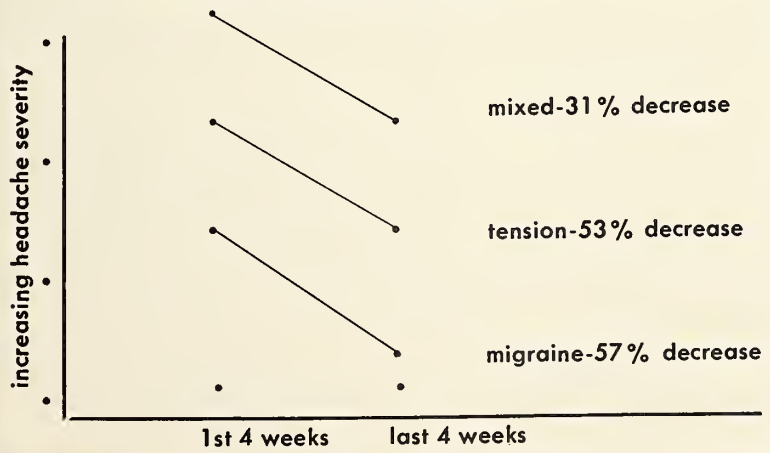
Drs. Charles and Sheila Adler of nver[1] have completed a five-year follow-up of 58 patients. They found that results were essentially the same after five years as at the end of biofeedback training. They define success as a 75% reduction in headaches. They achieved the greatest success with tension (88% of patients reduced headaches 75%), migraine (81%), and mixed types of headaches (60%).

Seymour Diamond, M.D., of the Chicago School of Medicine[3] reports a 40% success rate using biofeedback with 340 headache patients. In a follow-up study he found that 64% of migraine patients continued to show improvement, while 30% of tension and other types of headaches maintained improvement at the time of follow-up. Diamond also has reported an 81% success rate with 32 cases of childhood migraine.

TABLE 1
Statistical Results

	mean and standard deviation 1st 4 weeks-last 4 weeks		t	significance	mean % decrease
Headache Activity					
migraine-22pts	5.61±3.01	2.31±2.14	5.31	.0005	57%
tension-16pts	12.35±8.9	7.02±11.65	3.23	.005	53%
mixed-18pts	17.95±15.36	11.98±13.83	2.68	.01	31%
Drug Intake					
migraine-16pts	1.7±1.81	1.19±1.43	4.40	.0005	61%
tension-5pts	2.9±2.98	2.6±1.28	.24	insignificant	32%
mixed-7pts	4.74±3.61	3.8±3.31	1.43	insignificant	32%

TABLE 2
Decrease in Headache Activity



A long-term follow-up of the Menninger Foundation migraine headache program indicated that patients continued to maintain their success for at least two years after the conclusion of their biofeedback training. At the end of the program, 74% showed a 26% or greater reduction in headache activity.

Studies of tension headache at the University of Colorado Medical Center found that 70% of participants in biofeedback therapy showed a significant reduction in headache activity.

SUMMARY

The variation in success rates in these studies is related to how carefully patients are screened before being admitted to the biofeedback programs, and to differences in defining success. These studies, along with an accumulating body of clinical and research evidence, indicate that biofeedback is an effective technique for selected headache patients. Through biofeedback training these patients can learn to maintain their physiology within a normal range of functioning.

REFERENCES

1. Adler, CS, Adler, SM: The pragmatic application of biofeedback to headaches: A five-year clinical follow-up. *Biofeedback and Self-Regulation,* 1:3, September 1976.
2. Budzynski, T, Stoyva, J, Adler, C: Feedback-induced relaxation: Application to tension headache. *Journal of Behavior Therapy and Experimental Psychiatry,* 1:205, 1970.
3. Diamond, S, Franklin, M: Biofeedback: Choice of treatment in childhood migraine. Paper presented at 7th annual meeting of Biofeedback Research Society, Feb. 28, 1976.
4. Diamond, S, Medina, JL, Franklin, M: Biofeedback therapy for migraine. *Headache,* 16:115-118, July 1976.
5. Sargent, J, Solbach, P: A follow-up of the Menninger pilot migraine headache study using thermal training. *Menninger Foundation,* March 1977.

BOOK REVIEWS



Genitourinary Cancer

Donald G. Skinner, M.D. and Jean B. de Kernion, M.D. Copyright 1978. W. B. Saunders Co., W. Washington Square, Philadelphia 19105. 567 pages, including 216 illustrations, $36.50.

Although no penicillin-like breakthrough is either probable or perhaps possible in cancer treatment, small advances on many fronts are made each year so that, in total, the life expectancy for the patient from diagnosis to death increases inexorably in our country. A book of this type serves to update and correlate under one cover much of what is new in this sector of the campaign against the enemy —cancer.

There are 35 contributors from all areas of North America and they cover 31 chapters from neoplasms of the kidney through the entire urinary and genital systems. Excellent chapters on immunotherapy, chemotherapy and radiation for the patient with urologic cancer are included, and I believe these are my favorites. After all, everyone knows that surgery has gone just about as far as practicable in this and other fields (witness treatment of cancer of the breast) and other thera pies are only commencing.

A beautiful example of this trend concern childhood rhadosarcoma of the prostate o bladder as seen in the chapter on Pediatri Genitourinary Tumors by John Smith and Wil liam Clatworthy of Columbus, Ohio. A rea sonable resection followed by intensive chemo and radiotherapy has increased the surviva from 18% prior to 1967 to 86% recently. Thi is true also for nephroblastoma (Wilms' tu mor).

The penultimate chapter on nutrition de fines cancer cachexia and its possible treat ment with hyperalimentation and other mod ern means. The last dissertation on palliatio by Balfour Mount of McGill University con cerns the art of good medicine as it applies t the cancer patient and is what we all need t study today.

All in all, highly recommended urologi reading.

RODNEY A. MANNION, M.D
Urologist
LaPorte

General Urology, 9th Edition

Edited by Donald R. Smith, M.D. Copyright 1978, Lange Medical Publishers, Los Altos, Calif. 94022. 541 pages, $14.50.

A few years ago I reviewed the 7th Edition of this book and commended the editor for presenting new information and not merely "rehashed (knowledge) in a new cover." Six years have passed and the book is now more than 100 pages longer with entirely new sections on Immunology of Genitourinary Tumors, Ultrasonic Examination, an extensive coverage of tumors and chemotherapy in urologic malignancy, and finally a chapter on sexual differentiation and new aspects of genetics.

The Lange Medical Books are compendiums of scientific and clinical subjects printed in soft cover, handbook form. The editor and just two or three writers cover most of th chapters here, which range over the entir gamut of anatomy, physiology, clinical aspect relative to the genitourinary system. The photo graphs and diagrams illuminate the text ade quately in this volume (as they also did i 1972).

Anyone wishing an overview of urolog either for study or teaching will find this boo useful. The earlier edition had a more specifi table of contents to facilitate reference, but tha is a minor criticism.

For the price it is a bargain for the interested reader.

RODNEY A. MANNION, M.D
Urologist
LaPorte

ONE OF OUR BEST MEDICINES IS

℞ LOVE.

Another one is experience. Those two things, together with exceptional staff, outstanding facilities and value, are the reason why so many people trust the name Americana.

Americana Healthcare Center

1345 N. Madison Ave. / Anderson, IN 46011 / (317) 644-2888
343 S. Nappanee St. / Elkhart, IN 46514 / (219) 293-2544
5600 E. 16th St. / Indianapolis, IN 46218 / (317) 356-0911
2010 N. Capitol Ave. / Indianapolis, IN 46202 / (317) 924-5821
8350 Naab Rd. / Indianapolis, IN 46260 / (317) 297-4111
3518 S. Lafountain St. / Kokomo, IN 46901 / (317) 453-4666
2201 Cason St. / Lafayette, IN 47904 / (317) 447-4102

Open Visiting Hours / Approved for Medicare

Americana. The nursing care for people who care about quality.

BOOK REVIEWS

Normal Radiographic Patterns and Variances of the Human Skeleton

Prof. Rudolf Birkner, M.D., Berlin. Copyright 1978, Urban & Schwarzenberg, 7 E. Redwood St., Baltimore 21202. 560 pages, $74.

This comprehensive book is authored and printed in Germany. The paper and printing is of highest quality. Some 1,000 positive print radiographs are used. These are of excellent clarity and the anatomic features of the x-rays are clearly defined. Fully Anglocized terminology is much appreciated.

The book is divided into three sections. Section A is entitled Fundamentals of Radiation Physics, Picture Formation and Radiation Protection. The 26-page presentation is basic and is written to be understood by x-ray technologists. The facts and viewpoints are sound and of particular value for teachers of technologists or medical students.

Section B is labeled Radiographic View of the Normal Adult Skeleton. This covers skeletal anatomy demonstrated primarily by well labeled radiographs. Many clear illustrations including some from Sobotta are used. Conventional positioning plus some special views for radiographers are included, but these areas of the book are not always clear and the book is not of great value for technique. Included in Section B is extensive coverage entitled Variants and Sources of Diagnostic Error. I conside this the most valuable part of this book for th practicing radiologist or orthopedic surgeon.

Section C, called Radiographic View of th Normal Infant and Adolescent, traces bone de velopment prenatally through maturity. Agai the normal, variations of normal and som abnormal skeletal development are included Osseous maturation of the entire skeleton i defined.

There is minor detraction from the value o the book related to a few typographical o translation errors. For instance, ". . . there are no characteristic x-ray symptoms for Bech terews disease."

The book is extensively referenced from world literature, predominantly Scandanavian and German, and is well indexed.

I consider the book to be of substantial value as a reference in any x-ray department. It would also be of value as a text and reference for resident trainees in diagnostic radiology, neurosurgery, pediatrics and orthopedics.

W. L. BRIDGES, M.D.
Radiologist
Fort Wayne

Current Pediatric Diagnosis & Treatment

C. Henry Kempe, M.D., Henry K. Silver, M.D., Donough O'Brien, M.D., and associate authors. 5th Edition, Copyright 1978. Lange Medical Publications, Los Altos, Calif. 94022. 1,102 pages, $17.

This book was written by 51 authors and has 38 chapters. It is the new 5th edition and continues to be as good as the previous editions. The book is also published in several foreign languages.

This new edition introduces changes of emphasis in some areas of the pediatric diagnosis and treatment. Chapters on respiratory tract, orthopedics, developmental problems of childhood and neoplastic diseases have been rewritten. All contributors are or have been faculty members of the University of Colorado.

The printing and illustrations are generally good. The cost is quite reasonable. I would like to recommend this book highly, particularly for medical students, residents and busy practicing physicians.

WEI-PING LOH, M.D.
Pathologist
Gary

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
112B - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 33B
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company

NEWS NOTES

WAT-21 Viewing Areas

WAT-21, the I.U. School of Medicine's instructional television station, is operated by the school's Medical Educational Resources Program (MERP). It serves Indiana's physicians and allied health professionals with continuing medical education programs four hours each weekday from 10 a.m. to 2 p.m. The daily schedule is repeated in the evening to all Marion County (Indianapolis) hospitals. Evening programming at hospitals in other cities is indicated in WAT-21's monthly program schedule.

Listed below are locations for WAT-21 receivers:

Beech Grove: St. Francis Hospital Center;

Bloomington: Bloomington, I.U. Student Health Center;

Dyer: Our Lady of Mercy;

East Chicago: St. Catherine;

Evansville: Deaconess, St. Mary Medical Center, Welborn Baptist;

Ft. Benjamin Harrison: Hawley Army Health Clinic;

Fort Wayne: Lutheran, Parkview Memorial, St. Joseph;

Gary: Methodist, St. Mary Medical Center, Northwest Center for Medical Education;

Hammond: St. Margaret;

Indianapolis: Community, Methodist, Riley, St. Vincent, University, Veterans, Winona Memorial, Wishard Memorial;

Jeffersonville: Clark County Memorial;

Kokomo: Howard Community, St. Joseph;

Lafayette: Arnett Clinic, Home, St. Elizabeth;

Mishawaka: St. Joseph;

Muncie: Ball Memorial;

New Albany: Floyd County Memorial;

South Bend: Memorial, Osteopathic, St. Joseph;

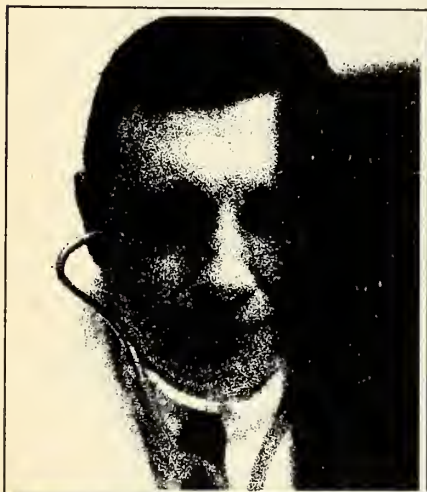
Terre Haute: Terre Haute Regional, Union;

Valparaiso: Porter Memorial;

Vincennes: Good Samaritan;

Washington: Daviess County;

West Lafayette: Purdue Student Hospital, Lafayette Center for Medical Education.



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS

Operated by PHYSICIANS

For the protection of PHYSICIANS

P&SLI

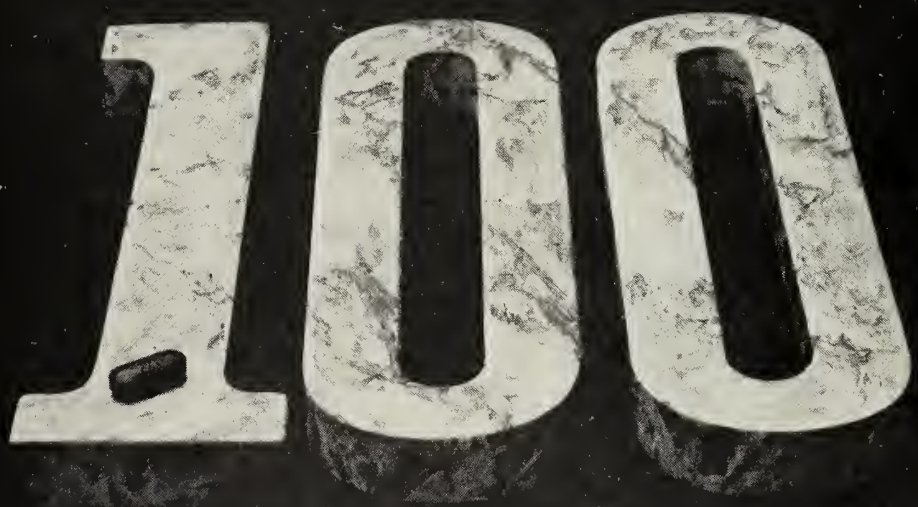
Physicians & Surgeons Liability Insurance Co., Inc
800 MacArthur Boulevard / Munster, Indiana 46321
219 836-2288

contains no aspirin

tablets

Darvocet-N® 100 Ⓘⓥ

100 mg. Darvon-N® (propoxyphene napsylate)
650 mg. acetaminophen



Lilly

Additional information available to the profession on request from Eli Lilly and Company Indianapolis, Indiana 46206

700565

Eli Lilly and Company, Inc.
Carolina, Puerto Rico 00630

NEWS NOTES



I'M SORRY, BUT HE'S OUT WITH A BROKEN JAW.



The value of early fitting

Research has proven the fitting of prostheses on children should be accomplished as early as is practicable. It has only been a few years since the child amputee was not considered ready until just before pre-school age or even later. Extensive experience demonstrates that fitting at a much earlier age produces more effective results.

If there are no complicating factors, children with arm amputations usually should be provided with a passive type of prosthesis soon after they are able to sit alone, generally at about six months of age. Lower-extremity child amputees should be fitted with prostheses as soon as they show signs of wanting to stand. The development of muscular coordination of child amputees is the same as for non-handicapped children; and, therefore, this phase may take place as early as eight months or as late as 20 or more months.

For more information, please write to:

Hanger PROSTHESES

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807



Lester D. Bibler, M.D.

Bibler Professorship

The Department of Family Medicine of Indiana University School of Medicine announces the establishment of an endowed professorship in the name of Dr. Lester D. Bibler. The endowment will support the salary of a full-time faculty physician in the department. A campaign is now in progress to obtain funds to complete the financial support necessary. Contributions may be sent to Dr. A. Alan Fischer, chairman of the Department of Family Medicine, 1100 W. Michigan St., Indianapolis, 46202, or to the I.U. Foundation marked for the Lester D. Bibler fund.

Malpractice Intervention

The U.S. Justice Department is drafting legislation that would require all states to set up pretrial screening panels to review all malpractice claims. (Public Law 146 already provides for this in Indiana.) If enacted—some observers believe this could happen this year—it would be the first time that state jurisdiction over medical professional liability matters has been usurped by the federal government.

Medical Films Directory

More than 200 medical films, available on free loan, are described in the new 1978-79 Directory of Medical Films, Audio-Visuals and Medical Education Resources just published by Norwich-Eaton Pharmaceuticals. Twenty-one of the 211 films are new since last year. Free copies of the directory may be obtained from Norwich-Eaton representatives or by writing to Norwich-Eaton at Norwich, New York, 13815.

Pesticide Poisonings

A 75-page medical treatment manual entitled, "Recognition and Management of Pesticide Poisonings" is available from the Pesticide Branch, U.S. Environmental Agency, 230 S. Dearborn, Chicago 60604. Physicians or Poison Control Centers may obtain emergency information on pesticide poisoning from the agency between 8 a.m. and 4:30 p.m. during the week by calling (312) 353-2192.

NEWS NOTES



PLEASE REFER TO IT AS TENTATIVE DIAGNOSIS, NOT GUESSWORK.

Hospital Elections

Morgan County Memorial Hospital, Martinsville—Dr. Richard S. Witham, chief of staff; Dr. Robert E. Brubeck, vice chief of staff; Kenneth E. Beaman, D.O., secretary-treasurer.

St. Francis Hospital, Beech Grove—Dr. Donald McCartney, president; Dr. Gerald DeWester, president-elect; Dr. Robert Madden, secretary.

Memorial Hospital, Jasper—Dr. Phillip Dawkins, president; Dr. Jerry Rendel, secretary-treasurer; Dr. Charles Klamer, immediate past president.

Methodist Hospital, Indianapolis—Dr. James Gosman, president; Dr. Hunter Soper, vice-president; Dr. H. Marshall Trusler, secretary-treasurer.

Huntington Memorial Hospital—Dr. Richard W. Wagner, chief of staff; Dr. William A. Clunie, vice chief of staff; Dr. B. J. Krueger, secretary.

St. Mary's Hospital, Evansville—Dr. Kenneth J. Rudolph, president; Dr. C. Kenneth Wilhelmus, vice-president; Dr. Ben E. Woodward, secretary-treasurer.

St. Elizabeth Hospital, Lafayette—Dr. J. L. Kelley, president; Dr. C. T. Cline, president-elect; Dr. C. J. Snodgerath, secretary-treasurer.

Lafayette Home Hospital—Dr. Charles Waits, president; Dr. David F. Alstott, president-elect; Dr. John C. MacLennan, secretary-treasurer.

Memorial Hospital, South Bend—Dr. Hansel O. Foley, president; Dr. Philip R. Meyers, vice-president; Dr. John O. Hildebrand, secretary-treasurer.

Fellowships

The following ISMA members have been admitted to Fellowship in the American College of Cardiology:

Dr. Ian R. Gardner, South Bend;
Dr. Paul F. Howard, South Bend;
Dr. John L. Rubush, South Bend;
Dr. William S. Sarnat, South Bend;
Dr. Kwang-Duck You, Munster.

Dispensing Fee Upped

The State Department of Public Welfare has increased by 25 cents the professional dispensing fee pharmacists may charge the state for filling prescriptions of persons eligible for assistance under the Medicaid program. The rate, effective Feb. 1, 1979, is now $2.50.

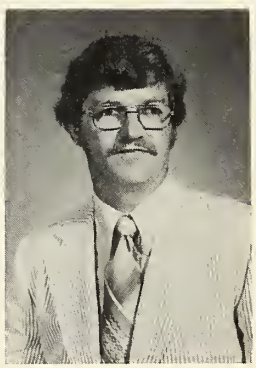
No Toll-Free Number for CHAMPUS

The new CHAMPUS contractor for Indiana and Kentucky, Blue Cross of Southwestern Virginia, will NOT have a toll-free telephone number as originally announced. Their headquarters, in Roanoke, Va., can be reached at 703-989-3384 or 703-989-3385. The new CHAMPUS contract went into effect Sept. 15.

The Williams & Wilkins Co.

Baltimore, Maryland

We are proud to announce that George Hood is our new sales representative for Illinois, Indiana, and Wisconsin.



George W. Hood
15127 Las Flores Lane
Oak Forest, Il. 60452
(312) 687-9011

George is eager to supply you with books and journals from Williams & Wilkins as well as titles from Lea & Febiger and Little, Brown.

Please look for George's display in your hospital or call him at home for prompt service.

George will be happy to accept your Master Charge or VISA card for any Williams & Wilkins; Little, Brown; and Lea & Febiger title.

NEWS NOTES

Blues Increase Dispensing Fee

Effective Feb. 1, the dispensing fee for prescriptions was increased to $2.75, according to Blue Cross and Blue Shield of Indiana. Claims must now reflect this new amount for providers to receive the increase in reimbursement.

Requests for claim forms or assistance in resolving claim problems should be directed to the Professional Provider Assistance Unit of Blue Cross and Blue Shield. Pharmacies in Marion County should call 263-4764, and all pharmacies outside Marion County should use the toll free WATS line, 1-800-382-1600.

Medic Alert Week April 1-7

The second annual National Medic Alert Week i slated for April 1-7, according to Alfred A. Hodde president of Medic Alert Foundation International "One of five Americans has a hidden medical condi tion, ranging from medication allergies to diabetes an heart problems," Hodder said. "It is our goal to inforn the public that the Medic Alert system of 24-hour-a day, lifetime protection is available and can prevent in correct and, in some cases, fatal treatment in an emer gency."

For information, Write Medic Alert, Turlock, Cali fornia 95380.

Physician Recognition Awards

The following Indiana physicians are recent recipients of the AMA's Physician Recognition Award. This award is official documentation of Continuing Medical Education hours earned, and is acceptable proof in most states requiring CME in re-registration that the mandatory hours of CME have been accomplished.

Abeleda, Lamberto V., Shelbyville
Adamson, William E., Evansville
Adler, Alan J., Kokomo
Ahler, Kenneth J., Rensselaer
Anderson, Stephen L., South Bend
Angeles, Armando E., Connersville
Angulo, Edilberto D., Munster
Arshad, Mohammad, Merrillville
Babcock, James L., Bluffton
Baker, Glenn W., Brownsburg
Bentz, John M., Bluffton
Beuerman, Virgil A., Lafayette
Boling, Frederick F., Indianapolis
Boonjarern, Sampanta, Lowell
Boyd, Carl R., Logansport
Brantly, James M., Indianapolis
Brewer, Robert A., Logansport
Brillhart, James R., Indianapolis
Burton, Robert L., Gary
Byrne, David A., Bloomington
Cavins, John A., Indianapolis
Caylor, Charles H., Bluffton
Cooper, William E., Columbus
Crates, Gordon C., Denver
Devetski, Robert L., South Bend
Dian, Donald A., Bluffton
Dizon, Belen R., Munster
Drummond, James A., South Bend
Dyken, Mark L., Indianapolis
Eastlund, Marvin E., Fort Wayne
Eckert, Russell A., Logansport
Edwards, Rodney D., Evansville
Eller, Alvan L., Flora
Ellis, Davis W., Rushville
Engel, Howard R., South Bend
Fields, Max L., Monticello
Friedman, Isadore E., Munster
Geller, Samuel, Evansville
Gerlanc, Milan D., Evansville
Gillum, Eugene M., Portland
Gordon, Roger D., Munster
Graf, Russell E., Bluffton
Graham, Nelson V., Evansville
Griest, Walter D., Fort Wayne
Griffith, Harold R., Fort Wayne
Hall, Bernard R., Logansport
Hammitt, Karleen B., Madison
Henson, Stephen L., Lafayette
Hobbs, Hudner L. S., Indianapolis
Hughes, William B., Waterloo
Hunter, Robert E., Muncie
Jameson, Robert J., Muncie
Johnson, John C., Brownsburg
Jones, Henry L., Indianapolis
Kennedy, David B., Russiaville
Kephart, Stewart B., Bluffton
Kho, James B., Terre Haute
Kissel, Wesley A., Indianapolis
Kitt, Walter, Munster
Koenig, Robert L., Valparaiso
LaFollette, James W., Bloomington
Langston, Edward L., Flora
Lawrence, James M., Indianapolis
Lohmuller, Herbert W., Bluffton
Lovett, Harvey D., Zionsville
Marhenke, Jon D., Indianapolis
Martin, Freeman, Indianapolis
Martino, Robert S., Gary
Matzen, Richard N., Bluffton
McClary, Charles W., Bloomington
McDougal, Robert A., Danville
Meier, Donald W., Bluffton
Mellinger, Michael D., LaGrange
Mullican, William S., Evansville
Nelson, Delbert W., Berne
Niksch, William L., Valparaiso
Panfili, Catherine A., Evansville
Pantzer, John G., Indianapolis
Paraiso, Antonio Q., Richmond
Pierce, Emmett C., Greenfield
Pietz, David G., Bluffton
Pillai, Vijayan V., Bedford
Porter, George S., Richmond
Purcell, Lawrence T., Bluffton
Purcell, Richard J., Griffith
Rai, Swaroop, Huntingburg
Rehme, Christopher G., Indianapolis
Reid, James D., Marion
Reynolds, Richard J., Terre Haute
Ritchie, William D., Evansville
Ritter, Merrill A., Indianapolis
Roth, James R., Wolflake
Rusher, Merrill W., Fort Wayne
Sauer, John B., Beech Grove
Serrano, Jose F., Hammond
Shah, Ajit, Marion
Shinn, Gloria L., Bluffton
Slama, Thomas G., Indianapolis
Stein, Mark H., Indianapolis
Strate, Randall W., Indianapolis
Strehler, Don A., Bluffton
Sturdevant, Frank M., Valparaiso
Sugarman, Donald R., Fort Wayne
Surian, Michael A., Bloomington
Swihart, Danny D., Elkhart
Tan, Juan P., Munster
Thephasdin, Jiroj, Crown Point
Turrell, Eugene S., Indianapolis
Umphrey, James E., Bluffton
Van Meter, C. Powell, Indianapolis
Wagner, Virginia M., Indianapolis
Walter, Lawrence P., Goshen
Wehlage, David F., South Bend
Wolter, Charles F., Seymour
Wooten, Mona F., Evansville
Wooten, William G., Evansville
Zabaneh, Samir I., Munster

NEWS NOTES



SORRY, THAT'S NOT MY WAITER.

ere and There . . .

. . . **Dr. Hassi Shina** of Charlestown has been med county jail physician by the Clark County mmissioners.

. . . **Dr. Thomas E. Hayhurst** of Fort Wayne has en elected to the board of directors, American Lung ssociation of Northeast Indiana as Allen County presentative.

. . . **Dr. John D. Lipson** of Columbus has been pointed Bartholomew County physician; he will be sponsible for medical services to jail inmates and r the care of residents of the county's home for the ed.

. . . **Dr. Duane A. Sebahar** of Columbus has been ected Bartholomew County health officer.

. . . **Dr. Joseph C. Finneran,** chief of surgery at St. incent Hospital in Indianapolis, is the new medical rector of the Washington Township Fire Department.

. . . **Dr. James N. Hampton** of Argos has been ected president of the Indiana State Board of Medi- l Examiners.

. . . **Dr. Donald M. Kerr,** Lawrence County health fficer, has been elected to the board of directors, edford Chamber of Commerce.

. . . **Dr. Sprague H. Gardiner** of Indianapolis has een re-elected vice chairman of the board of trustees, Iarion County Health and Hospital Corp.

Dues Drive Is Successful

The ISMA Membership Department reports that 75% of Association members paid their annual dues on time this year. That's a tremendous improvement over last year and shows that the majority of ISMA members are aware of the importance for such prompt response to the billing. One of the ways ISMA is able to avoid dues increases is by investing dues dollars.

Education Report Available

"A Report to the President & Congress on the Status of Health Professions Personnel Education in the United States" is now available. It was prepared by HEW last August but was only recently printed in quantities for distribution. Write the Executive Secretariat, Bureau of Health Manpower, 3700 East-West Highway, Hyattsville, Md. 20782.



PHYSICIANS' DIRECTORY

INTERNAL MEDICINE

Offices for the doctors listed below are located at 3130 N. Meridian St., Indianapolis 46208; the switchboard number is 317-927-1221.

MERIDIAN MEDICAL GROUP

CARDIOLOGY
Richard M. Nay, M.D.
Warren E. Coggeshall, M.D.
Richard R. Schumacher, M.D.
William C. Elliott, M.D.

HEMATOLOGY—ONCOLOGY
Laurence H. Bates, M.D.
William M. Dugan, M.D.
James E. Schroeder, M.D.
Frank A. Workman, M.D.
Deborah S. Provisor, M.D.
Pediotrics

METABOLISM AND ENDOCRINOLOGY
William M. Holland, M.D.

GASTROENTEROLOGY
Robert D. Pickett, M.D.
B. T. Maxam, M.D.
Lee G. Jordan, M.D.
Martin P. Meisenheimer, M.D.

INTERNAL MEDICINE
Hunter A. Saper, M.D.
Douglas H. White, Jr., M.D.
Michael B. DuBois, M.D.
Nephrology
Michael P. Bubb, M.D.
Robert L. Iverson, Jr., M.D.
Critical Care
Michael Zeckel, M.D.
Infectious Diseases

INFECTIOUS DISEASES
Thomas G. Slama, M.D.

NEUROLOGY
Norman W. Oestrike, M.D.
Charles Rehn, M.D.

NEPHROLOGY & INTERNAL MEDICINE, INC.

Doniel J. Aheam, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegemon, M.D.
Douglas F. Johnstone, M.D.
LeRoy H. King, Jr., M.D., FACP

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capitol, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.

Neurological Surgery

1815 North Capitol Avenue Indianapolis 46202

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY

5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Training for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

HAND SURGERY

By oppointment Phone 317-783-1319

VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.

Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery

3530 S. Keystone, Suite 305 Indianapolis 46227

PHYSICIANS' DIRECTORY

PSYCHIATRY

JOHN H. GREIST, M.D.

Diplomote, Board of Neurology and Psychiatry

Specializing in Psychiatry

3231 North Meridian Street Indianapolis 46208

GORDON T. BROWN, M.D.

Diplomate, Americon Board of Psychiatry and Neurology

Adult and Adolescent

Psychotheropy, Consultation, Evaluation

Tel: (317) 923-3269

3266 North Meridian Street Indionapolis 46208

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
PAUL M. FLANAGAN, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

ALLERGY

INDIANA ASTHMA & ALLERGY ASSOCIATES

Specializing in Chronic Severe Asthma

and

Adult and Pediatric Allergic Disorders

D. Duane Houser, M.D., Inc.
(317) 923-7650

and

Douglas J. Horton, M.D.
(317) 923-6990

1815 N. Capitol Avenue
Indianapolis, Indiana 46202

Diplomates, American Board of Allergy & Immunology Answering Service 926-3466

CARDIOLOGY

William K. Nasser, M.D. and Michael L. Smith, M.D. are pleased to announce the addition of Cass A. Pinkerton, M.D. for the practice of cardiology and cardiac catherization.

8402 Harcourt Rood, Room 413
St. Vincent's Professional Building
Indianapolis — (317) 257-9316

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.

Certified: American Board of Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons

Specializing in Colon and Rectal Surgery

214 Sherland Building
105 Eost Jefferson Blvd. South Bend, Ind. 46601

OBITUARIES

Emil H. Dowell, M.D.

Dr. Dowell, 83, a retired Rockville physician, died Nov. 28 at Vermillion County Hospital.

He was the father of Mrs. Carole Rust, executive director of the Vanderburgh County Medical Society.

Dr. Dowell, who retired in 1974 after practicing in Rockville 48 years, was a graduate of the Indiana University School of Medicine. He was a veteran of World War I.
Association.

Melvin Lichtenberg, M.D.

Dr. Lichtenberg, 64, an Indianapolis family physician for 35 years, died Dec. 4 at St. Vincent Hospital, Indianapolis.

He was a 1937 graduate of the Indiana University School of Medicine. A World War II Army veteran, he had just recently become a general medical officer at Ft. Benjamin Harrison, Indianapolis.

Dr. Lichtenberg was a member of the American Acadamy of Family Physicians.

David A. Eisenberg, M.D.

Dr. Eisenberg, 68, a Martinsville physician since 1947, died Dec. 17 in Morgan County Memorial Hospital.

He was a native of Cleveland, Ohio, and received a medical degree in 1940 from Loyola University Medical School.

Dr. Eisenberg was a former president of the Morgan County Medical Society.

Raymond M. Borland, M.D.

Dr. Borland, 84, a retired Bloomington physician, died Jan. 2 at his home.

He was a 1926 graduate of Indiana University School of Medicine.

Dr. Borland, a World War I veteran, was a physician for the Monroe County Metropolitan School System and was a former Monroe County health officer. He became a senior member of the ISMA in 1969.

John R. Ware, M.D.

Dr. Ware, 51, a Russiaville physician for 20 years, died Jan. 18 at University Hospital, Indianapolis.

He was a 1958 graduate of the Indiana University School of Medicine.

Memorial contributions may be sent to the American Cancer Society.

Clarence H. Rommel, M.D.

Dr. Rommel, 78, a Lafayette physician for mo than 40 years, died Jan. 21 at Lafayette Home Hospit

He was a 1932 graduate of the Indiana Universi School of Medicine. In 1921 he had received a pha macy degree from Purdue University. He retired fro active practice in 1977.

Dr. Rommel, an Army veteran of both world wa was a Fellow of the International College of Surgeo and a past president of the Indiana Academy of Gene Practice. He became a senior member of the India State Medical Association in 1971.

Frank J. Kendrick, M.D.

Dr. Kendrick, 77, a native of Fort Wayne, died De 16 at Goshen General Hospital.

He was a dermatologist who moved to Greencr five years ago after having practiced in Gary 30 yea and in LaGrange four years.

A World War II veteran, Dr. Kendrick had served short time as Elkhart County health officer. He b came a member of the ISMA 50-Year Club last fall.

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Immediate delivery on many 1979 models

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

FOR LEASE: On Vanderbilt Beach near Naples, Fla., two-bedroom, two-bath new condominium on the beach. Docking facilities available. Tel: (317) 644-6147.

FOR SALE: GP office equipment and furniture. Good condition. Available in March. Call (219) 267-7987 after 4 p.m.

AVAILABLE IMMEDIATELY—A Physician's Assistant with two years experience seeking a position with a family or general practitioner. Resume and credentials available upon request to Mr. Robert L. Dougherty, 332 S. 20th St., Terre Haute, Ind. 47803.

USED MEDICAL EQUIPMENT and leftover supplies available. Logansport, Ind. Tel: (219) 753-4792.

LOCUM TENENS—EMERGENCY MEDICINE—available in our 100 hospitals; monthly scheduling is flexible and according to your preferences; malpractice is paid, excellent hourly income according to your flexibility and hours worked. Call toll free 1-800-325-3982, ext. 220 for details.

WANTED: Board certified or board eligible internist, general, or with subspecialty. University community of 40,000 with drawing area of about 100,000. One hour from ocean, mountains or desert. Six months guaranteed income. J.A.C.H. approved hospital, licensed for 195 beds. Resume: Box 1506, Loma Linda, Calif. 92354.

FEMALE FAMILY PRACTITIONER. Primary office work, 3 or 4 days a week, regular hours in Greenfield, Ind. Please contact Dr. James Anderson at (317) 462-5642.

FULL TIME position as Emergency Room Physician in 365-bed hospital. $48,000 guaranteed minimum. Contact Ralph D. Weller, M.D., Emergency Department, or Mr. Duane R. Vorseth, Associate Administrator, Lafayette Home Hospital, Inc., 2400 South St., Lafayette, Ind. 47904. Tel: (317) 447-6811.

FOR RENT: 1500 square foot ground level condominium, beach, golf courses, swimming pools, clay tennis courts, accommodates six, two private baths. Hilton Head Island, S.C. $275 per week. Call (812) 275-2800.

OPPORTUNITIES FOR PHYSICIANS—There are current openings among the Indiana State Hospitals at various locations throughout the State for psychiatrists and physicians of other specialties, at most experience levels. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, Ky. 42071 or call (collect) (502) 753-9772. Forrest is retained by the Indiana Department of Mental Health.

1979 Membership Roster

The 1979 Membership Roster is published as a Supplement to the March issue of The Journal. It is printed from information carried on the computerized Master File of the Indiana State Medical Association.

Additional copies: Send check with order to The Journal, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Ind. 46208. Single copies to members, $5; all others, $15. Checks should be made payable to the Indiana State Medical Association.



"Efficiency is the key to your practice"
Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE
6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

this publication is available in microform



Please send me additional information.
University Microfilms International

300 North Zeeb Road
Dept. P.R.
Ann Arbor, MI 48106
U.S.A.

18 Bedford Row
Dept. P.R.
London, WC1R 4EJ
England

Name_____
Institution _____
Street_____
City_____
State_____ Zip _____

ADVERTISERS IN THIS ISSUE

March 1979 Vol. 72 No. 3

Americana Healthcare Center 201
Anacomp 145
Beltone Electronics Corp. 203
Blue Cross-Blue Shield 147
Brown Pharmaceutical Co., Inc. 167
Burroughs Wellcome Co. 143, 190
Commercial Announcements 213
Hanger Prostheses 206
Immke Circle Leasing, Inc. 212
Import Motors 191
Indiana Medical Bureau 142
Lilly, Eli and Company, Inc. 205
McClain Car Leasing, Inc. 156
Mead Johnson Pharmaceutical Div. 159, 160
Medical Protective Company 148
Merck Sharp & Dohme 172
Merrell-National, Inc. ...150, 151, 152, 168, 169
Morris Plan 152
Northpoint Outfitters 209
Oxford Shop 157
P&SLI 204
Physicians' Directory 210
Professional Careers Institute 214
Roche Laboratories Covers, 188, 189
Rockwood Insurance Company 155
Smith, Kline & French 149
Townsend, J. Russell and Associates 165
Upjohn Company 170, 171, 172
Warner/Chilcott 180
Williams & Wilkins Co. 207

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

INDIANA STATE MEDICAL
ASSOCIATION. JOURNAL

April 1979 • Vol. 72 • No. 4

The JOURNAL

OF THE INDIANA STATE MEDICAL ASSOCIATION

SAN FRANCISCO, CA 94143

PEDIATRIC INDICATIONS* FOR BACTRIM CONTINUE TO GROW...

URINARY TRACT INFECTIONS

PNEUMOCYSTIS CARINII PNEUMONITIS

SHIGELLOSIS

ACUTE OTITIS MEDIA

*Involving susceptible organisms.

Please see Indications section in summary of product information on last page of this advertisement.

NOW...
ROCHE INTRODUCES

NEW CHERRY FLAVOR
BACTRIM™ PEDIATRIC
ROCHE *SUSPENSION*

Each teaspoonful (5 ml) contains
40 mg trimethoprim and 200 mg sulfamethoxazole.



cription
10-kg
o] child)

*ESPECIALLY FLAVORED FOR CHILDREN**

Also available: The original fruit-licorice flavor to be prescribed Bactrim Suspension." The same active ingredient formulation—the difference is the flavor.

aindicated in children under 2 months of age.

Please see summary of product information on following page.

BACTRIM

(trimethoprim and sulfamethoxazole)

ROCHE

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.
For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.
For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.
Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.
Contraindications: Hypersensitivity to trimethoprim or sulfonamides, pregnancy, nursing mothers, infants less than two months of age.
Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.
Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.
Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.
Dosage: Not recommended for infants less than two months of age.
URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN
Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.
Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg./kg. trimethoprim and 40 mg./kg. sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis. A guide follows:

Children two months of age or older:

Weight		Dose—every 12 hours	
lbs	kgs	Teaspoonfuls	Tablets
22	10	1 teasp. (5 ml)	½ tablet
44	20	2 teasp. (10 ml)	1 tablet
66	30	3 teasp. (15 ml)	1½ tablets
88	40	4 teasp. (20 ml)	2 tablets or 1 DS tablet

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	½ the usual regimen
Below 15	Use not recommended

PNEUMOCYSTIS CARINII PNEUMONITIS: Recommended dosage: 20 mg./kg. trimethoprim and 100 mg./kg. sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.
Supplied: *Double Strength (DS) tablets,* each containing 160 mg. trimethoprim and 800 mg. sulfamethoxazole: bottles of 100, Tel-E-Dose® packages of 100, Prescription Paks of 20. *Tablets,* each containing 80 mg. trimethoprim and 400 mg. sulfamethoxazole—bottles of 100 and 500, Tel-E-Dose® packages of 100, Prescription Paks of 40, available singly and in trays of 10. *Pediatric Suspension,* containing in each teaspoonful (5 ml) the equivalent of 40 mg. trimethoprim and 200 mg. sulfamethoxazole: cherry flavored—bottles of 16 oz. (1 pint). *Suspension,* containing in each teaspoonful (5 ml) the equivalent of 40 mg. trimethoprim and 200 mg. sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz. (1 pint).

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

April, 1979 Meeting

April 4–7 **Tennessee Medical Association**
Airport Milton Inn
Memphis, Tennessee

April 19–21 **Alabama Medical Association**
Birmingham Hyatt House, Civic Cer
Birmingham, Alabama

April 19–22 **Missouri State Medical Associatio**
Chase-Park Plaza Hotel
St. Louis, Missouri

April 20–22 **Georgia Medical Association**
De Soto Hilton
Savannah, Georgia

April 21–22 **Iowa Medical Society**
Hyatt House
Des Moines, Iowa

April 22–25 **Arkansas Medical Society**
Little Rock Convention Center
Little Rock, Arkansas

April 25–29 **Arizona Medical Association**
Safari Hotel
Scottsdale, Arizona

April 26–29 **South Carolina Medical Associatio**
Myrtle Beach Hilton
Myrtle Beach, South Carolina

April 29–
May 2 **Nebraska Medical Association**
Holiday Inn
Kearney, Nebraska

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis



John Newell Hurty

Professor
Pharmaceutical Chemist
Physician

NUMEROUS BENEFICIAL things developed from Hurty's drugstore, which stood a century ago at the corner of Ohio and Pennsylvania Streets in Indianapolis, where the old Federal Building now stands.

Varro E. Tyler, Dean of Purdue University's School of Pharmacy and Pharmacal Sciences, in an article in the current issue of the PURDUE ALUMNUS, tells of a new book: PURDUE PHARMACY: THE FIRST CENTURY, by Robert B. Eckles, Emeritus Professor of History. The following excerpt from this book tells of an event that occurred here in 1883.

"James H. Smart, Purdue's fourth president, was chatting with John Newell Hurty and a group of friends in Hurty's Indianapolis drugstore where a small group of professional men would meet occasionally for talk and companionship. Hurty inquired if it would not be a good idea for Purdue, created just fourteen years earlier, to add courses to its curricula to train students as pharmacists. President Smart was reported to have struck a bargain, saying, 'I'm for it good and strong and will present the matter to the next Board meeting,' adding a proviso that Hurty would 'agree to serve as Professor of Pharmacy for at least two years.'"

Thus it was that Purdue's School of Pharmacy came into existence. Professor Hurty commuted to Purdue once a week to give his lectures, and continued to do so until 1890.

Most readers of this column associate the name Hurty with Hurty Hall in the Fesler Hall Building (formerly the State Board of Health Building) on the grounds of the Indiana University Medical Center. This was named in honor of the same Hurty. Dr. Hurty was, of course, the "Hoosier Health Officer" from 1897 to 1922, his remarkable career having been documented by Dr. Thurman Rice in his book of that title.

Although Hurty was fundamentally a pharmaceutical chemist, he was also an M.D. He received an honorary M.D. degree from the Central College of Physicians and Surgeons in 1881, and in 1891 he earned a degree from the Medical College of Indiana (both now in the Museum). He was licensed to practice medicine on Sept. 27, 1897 and was vice-president of the ISMA during the 1910-1911 year.

It was his distinguished career as the Commissioner of the Indiana State Board of Health that he is best known. His work elevated the public health standards of Indiana to the highest in the nation. His Pure Food Law of 1899 was essentially the same as that which Dr. Harvey Wiley (Medical Museum Notes, THE JOURNAL, 71:7, 640) who had also been a member of Purdue's faculty, effected nationally in the 1906 Pure Food and Drug Act.

Professor Eckles' book, PURDUE PHARMACY: THE FIRST CENTURY, is available, according to Dean Tyler's article, from the Office of Publications, Purdue University. The cost is $10.

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION (USPS 284-440)

Volume 72—April 1979—Number 4

Contents

SCIENTIFIC ARTICLES

259 **Exercise-Induced Asthma**—*L. Craig Miller, M.D.*
(16th Continuing Medical Education article)

264 **The Five Fingers of Cardiology**—*R. Joe Noble, M.D.*

266 **Anesthetic-Related Maternal Mortality in Indiana**—
Virginia K. Bond, M.D.

268 **Postinjection Corticosteroid Atrophy**—*Mac C. Roller, M.D.*

270 **Breast Cancer**—*Juanita Todd, A.C.S.W.*

273 **Clinical Notes: Dermatology**—*Jere D. Guin, M.D.*

274 **Diastematomyelia**—*Richard L. Gilmor, M.D.*

280 **Gonorrhea**—*Center for Disease Control*

SPECIAL FEATURES

220 **Editorial Notes**

222 **Commentary: Flight of Fancy**

230 **HMOs: Better Than Fee-for-Service System?**

231 **ISMA Auxiliary: 'We Can Do More Together'**

250 **Commentary: The 96th Congress**

252 **Unnecessary Surgery: Fact or Fiction?**

256 **Guest Editorial: Get Off Our Backs**

DEPARTMENTS, MISCELLANEOUS

217 **Medical Museum Notes**

224 **What's New?**

227 **ISMA Board Actions**

228 **Cancer Corner**

232 **Auxiliary Report**

234 **Future File**

239 **ISMA Calendar of Events**

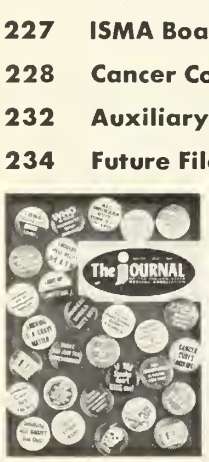
286 **Book Review**

286 **There's a Word for It**

288 **News Notes**

289 **ISMA Membership Roll**

296 **Obituaries**



ABOUT THE COVER

April has been designated as Cancer Crusade Month by the American Cancer Society. For the occasion Dr. Laurence H. Bates of Indianapolis provided us with a sampling of the anti-smoking buttons he and his family manufacture. (COVER BY FRED KINGHORN)

EDITORIAL AND ADVERTISING INFORMATION

All articles must be typewritten, double-spaced with margins of one inch.

Photographs should be printed an glassy paper. Negatives connot be used.

Illustrations ore desirable. Selectian af illustrations submitted ot discretion of editor ond editorial board members.

Contributors are responsible far all statements made in their orticles. The editors and editorial baard members may nat be in agreement with all views expressed by authors, but it is desired to give oll authors as greot latitude as possible.

Articles ore accepted for publication with the understanding that they ore submitted for exclusive publication.

Advertising rates will be furnished on request. Copy must be received by the 1st of the month preceding month of issue.

Representative for notionol odvertising is the State Medical Jaurnal Advertising Bureou, 711 Sauth Blvd., Oak Park, Ill. 60302.

Annual subscription rates: ISMA members, $8, Included in annual membership dues; ISMA seniar members, $10; Libraries, $12; all others, $14. Additianal postoge: Canada and PUAS countries, $2; Foreign, $3. Subscriptians are renewable in July and Januory.

Entered as second class matter January 25, 1933, at the Postaffice at Indianapalis, Indiana.

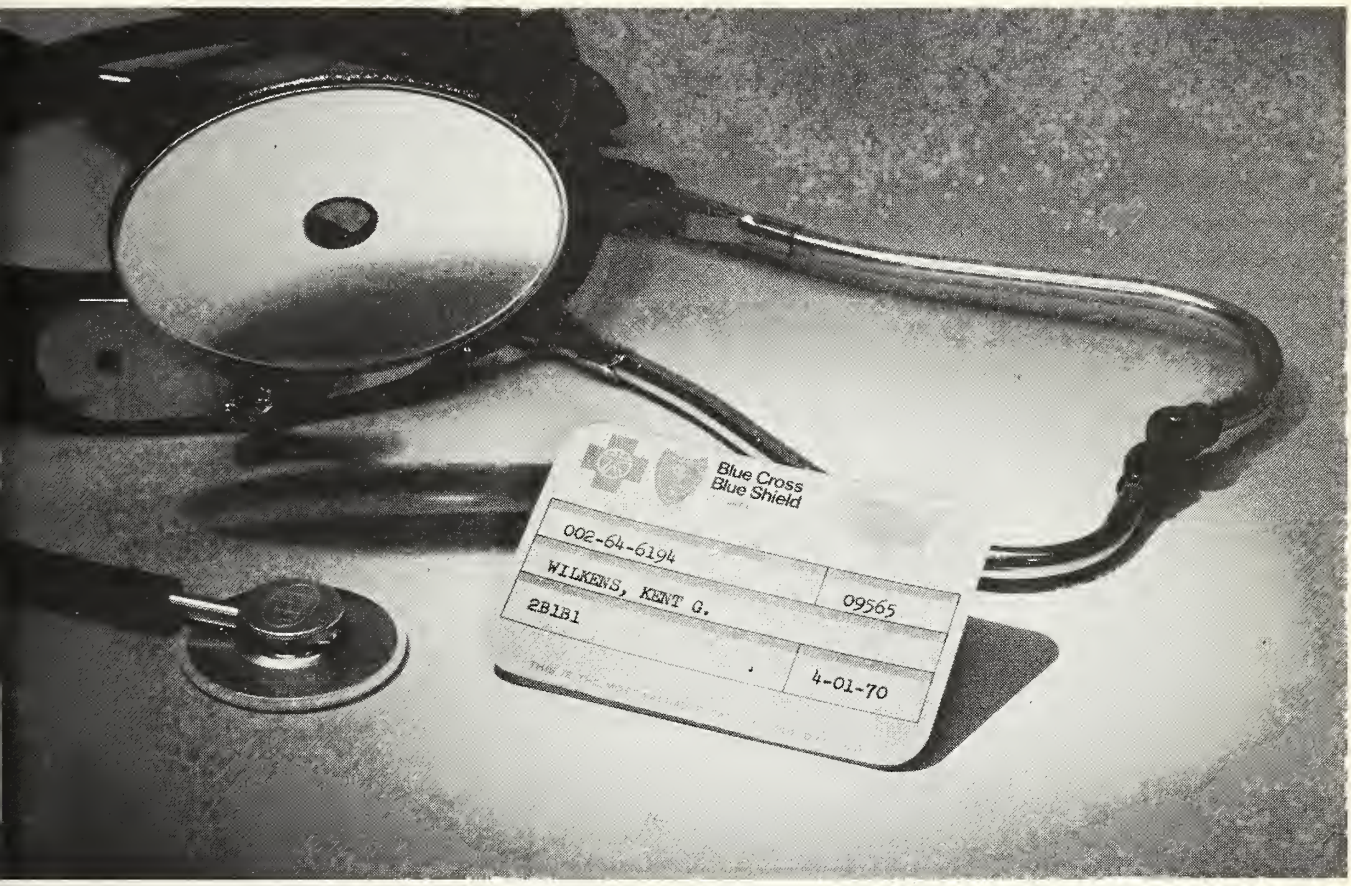
THE JOURNAL af the Indiana State Medical Associatian (USPS 284-440) is published monthly by the Indiana State Medicol Associotion, 3935 N. Meridian St., Indianapalis, Ind. 46208. Secand-class postage paid at Indianapolis, Ind., and at additianal mailing office. Na copyright is claimed.

All issues of 1967 and subsequently may be obtained on micrafilm. Address The Jaurnal for details.

Our Internatianal Standard Serial Number is ISSN 0019-6770.

Indexed in Index Medicus and Hospital Literature Index.

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- **One full year in-hospital care**
- **100% semi-private room and hospital extras**
- **Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy**
- **$250,000 Major Medical Benefits**

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Paul Biltimier, Senior Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4241.

We believe in being better

Blue Cross Blue Shield
of Indiana

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark. Nat'l Assn. of Blue Shield Plans

EDITORIALS

Editorial Notes . . .

Two fully documented cases of sickle cell anemia in American white children have been reported in PEDIATRICS. The index case was a fair-skinned, blue-eyed, blond three-year-old girl. Both parents, of Sicilian descent, as well as two of the girl's siblings, were found to carry the sickle cell trait. The parents know of no history of the disease in the family. The other reported case was a 10-year-old white girl who was adopted at the age of 5 days and whose parents were not located. The two active cases are the only ones ever diagnosed in the white race.

The Veterans Administration will "make every effort" to remove architectural barriers "so that no area in our system is off limits to handicapped persons." The directive applies to parking lots, entrances, exits, restrooms, elevators, meeting rooms and restaurants, and mandates easy access to emergency medical equipment and personnel.

The U.S. prescription pharmaceutical industry in 1977 scored an 8% increase in worldwide sales, up to a total of $14.7 billion. Sales are expected to top $16 billion for 1978. The industry expenditure for research and development also experienced an increase in 1977, up to $1,266 million.

The Veterans Administration has completed a follow-up study of the relationship between war-caused amputations and subsequent deaths from cardiovascular disease. Findings: One-third greater risk of death from all causes for veterans with amputation of both legs or of one leg at or above the knee. The risk of death from cardiovascular disease was more than 50% greater for the amputees. Amputation of arms, hands, or feet did not detectably increase the risk of death. Ischemic heart disease and other cardio-vascular diseases may be classified in the future as service-connected if occurring in a veteran with amputation of one leg at or above the knee or amputation of both legs at or above the ankles, if the proposed regulations are approved.

A national survey, sponsored by a leading international employee benefit consulting and actuarial firm, Johnson & Higgins, demonstrates that more than half of employees would prefer to continue working past their normal retirement age. Continued inflation was one factor that influenced this opinion. A strong majority of workers were satisfied with their pension plans but wished the plans could provide even more. Many of them doubted that Social Security would be able to pay benefits in years to come because of inflation and the likelihood that young workers in the future will refuse to pay increased contributions enough to amortize benefits.

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

Editor: Frank B. Ramsey, M.D., 3935 N. Meridian Street, Indianapolis 46208.

Consulting Editors: A. W. Cavins, M.D., R.R. 25, Box 172, Terre Haute 47802; Lall G. Montgomery, M.D., R.R. 1, Box 202, Gaston 47342; Somuel R. Mercer, M.D., 702 Medical Center Bldg., Fort Wayne 46802; I. W. Wilkens, M.D., 4820 E. Pleasant Run Pkwy., N. Dr., Indianapolis 46201; W. D. Snively, Jr., M.D., R.R. 1, Box 227, Evansville 47712; Charles A. Bonsett, M.D., 6133 E. 54th Place, Indianapolis 46226.

Editorial Board: Term Expires

Steven C. Beering, M.D., Indionopolis Dec. 31, 1981
Paul S. Rhoods, M.D., Richmond Dec. 31, 1981
Elton Heaton, M.D., Madison Dec. 31, 1979
Radney A. Mannion, M.D., La Porte Dec. 31, 1979
Alvin J. Haley, M.D., Fort Wayne Dec. 31, 1980
Wei-Ping Loh, M.D., Gary Dec. 31, 1980

Business Manager: Donald F. Foy 3935 N. Meridian, Indianapolis, Ind. 46208 Managing Editor: Martin T. Badger

Six important reasons why physicians are selecting the Reality® Medical Management System.

1. Improved Cash Flow. Timely patient statements which reflect the detailed account status of charges, payments and aged account balances contributes to faster payments and a reduction of bad debts.

2. Totally Automated Insurance Processing. The **Reality** Medical Management System has incorporated the processing of Medicare, Medicade, Blue Cross, Blue Shield and most other third party payors into the automatic billing and insurance claim reporting function, thus, eliminating clerical time, errors and lost charges.

3. Direct Control. No reports, no files, no charge tickets leave your office. Your personnel, who know your method of operations, communicate directly to the computer based system via a video display terminal. Everything is processed according to your schedule and in a manner which fits your Doctor to Patient relationship.

4. Improved Practice Control. From the management reports and practice statistics, your practice can be managed in ways which will more effectively utilize the resources of the practice, thus, generating a better return on your total investment.

5. Better Patient Care. Research by diagnosis can lead to better patient care. The System maintains data by patient, by procedure and by diagnosis, whereby, retrieval and analysis can provide historical treatment histories. Better patient scheduling by the System makes for better patient relations.

6. Communication With The System In English. Unlike other automated systems, the **Reality** Medical Management System is under your direct control (not through a programmer) in a common language used by human beings — known best as **English**. If you can type, you can talk to the System.

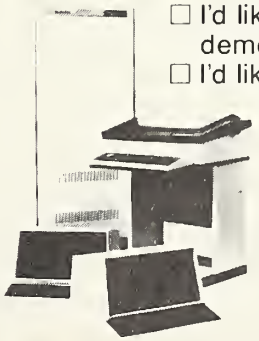
Take A Good Look At Reality. Call Anacomp or send in the coupon today for a free hands-on demonstration. Within 15 minutes you'll know all you need to know about choosing a computer.

Microdata

Attach your business card and send to:

Anacomp
4755 Kingsway Drive
Indianapolis, Indiana 46205

For immediate response, call **317/257-1426**



Show me.

☐ I'd like a free hands-on demonstration of Reality.®

☐ I'd like more information.

Commentary

A Flight of Fancy

Robert B. Howard, M.D.

(This item recently appeared in a publication of the Orange County Medical Association, Orange, California. The editors were unable to identify Dr. Howard or where the item originally appeared. Nevertheless, they said, "We are unable to resist sharing it. Our thanks, Dr. Howard.")

Flying an aircraft is much too serious a business to be left to the pilot. For far too long, pilots have enjoyed a kind of mystique which has permitted them to dominate the flight-care system in an unconscionable fashion. It is high time that we flight-care consumers asserted our fundamental rights.

I am tired of having the pilot tell me when I can board an aircraft, when I must buckle my seatbelt, at what altitude we will fly, and other comparable aspects of my flight-care consumption. The pilot, after all, is only one member of a flight-care team that also includes ticket sellers, boarding area personnel, cabin attendants, navigators, and copilots. The views of all of these people, experts in their respective fields, should be taken into consideration when flight care is being planned and executed. Obviously, the interests of the consumers must also be respected.

I suggest that what we need in the United States is a massive restructuring of the flight-care system that will free us of this unhealthy dominance by pilots, all of whom make too much money anyway. I believe that as every flight is about to depart, an appropriate Flight-Care Council should be formed. It would, of course, include the pilot, whose technical expertise is undeniably required. The council would also include among its members appropriate representatives of the ground crew and the flight crew. The majority of the members, however, should be flight-care consumers, chosen on the basis of a careful consideration of the sexual, ethnic, and religious makeup of the consumer group on the flight in question.

The Flight-Care Council would be responsible for making key policy decisions with respect to the flight, including the time of take-off, the altitude at which the aircraft would fly, where the flight would stop along the way, and the ultimate destination.

After the landing, an Airstrip Utilization Review Committee would make a determination of whether the landing was indeed necessary. In the event that it is deemed to have been unnecessary, the pilot would be forced to take off again.

I urge that our lawmakers speedily enact appropriate legislation that will bring about these long overdue changes in the flight-care system and bring an end to the pilot tyranny that has resulted in maldistribution of flight-care service, unnecessary flights, and lack of attention to the real needs of consumers.

1979 Membership Roster

The 1979 Membership Roster was published as a Supplement to the March issue of The Journal. It was printed from information carried on the computerized Master File of the Indiana State Medical Association.

Additional copies: Send check with order to The Journal, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Ind. 46208. Single copies to members, $5; all others, $15. Checks should be made payable to the Indiana State Medical Association.

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
1128 - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company

WHAT'S NEW?

The J. B. Williams Company, a New York-based pharmaceutical firm, is introducing an easy-to-use pregnancy test suitable for home use. It has been found to be 97% accurate when used under home conditions. It is effective as early as nine days after the first missed period. Its usefulness is heightened by the importance of early prenatal care and by the advantage of avoiding certain drugs during pregnancy, especially in the early weeks.

* * *

The 3M Company has a new Red Dot brand Special Procedure Electrode. It has a high-tack "quick-stick" adhesive that keeps the electrode in place under strenuous conditions such as exercise stress tests. It is specially recommended for use in emergency rooms and in ambulances.

* * *

Squibb announces the addition of HALOG OINTMENT .025% to its Halog line of topical corticosteroids. This preparation is especially indicated in prolongation of treatment after control has been achieved by higher-strength steroids and maintenance dosage is desired.

* * *

Codman & Shurtleff is introducing a new self-retaining abdominal retractor. The BOOKWALTER Retractor attaches directly to the O.R. table rail over either paper or linen drapes. Interruption of the sterile field is not necessary. The retractor is applicable to all types of incisions and produces multidirectional exposure.

* * *

Ical, Inc. is introducing a hand-held, battery-operated digital tonometer that simplifies glaucoma tests. The device is named Digiton. It uses rechargeable batteries and digitally displays intraocular pressure in Schoitz units. An automatic zeroing feature does away with the need for recalibration.

* * *

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

Tenuate® ℞
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence.* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.
PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
Direct Medical Inquiries to:
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request – Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

Whether overweight is a complicating factor... or just uncomplicated overweight.

Tenuate® Dospan® ℂ℞
(diethylpropion hydrochloride NF)
75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

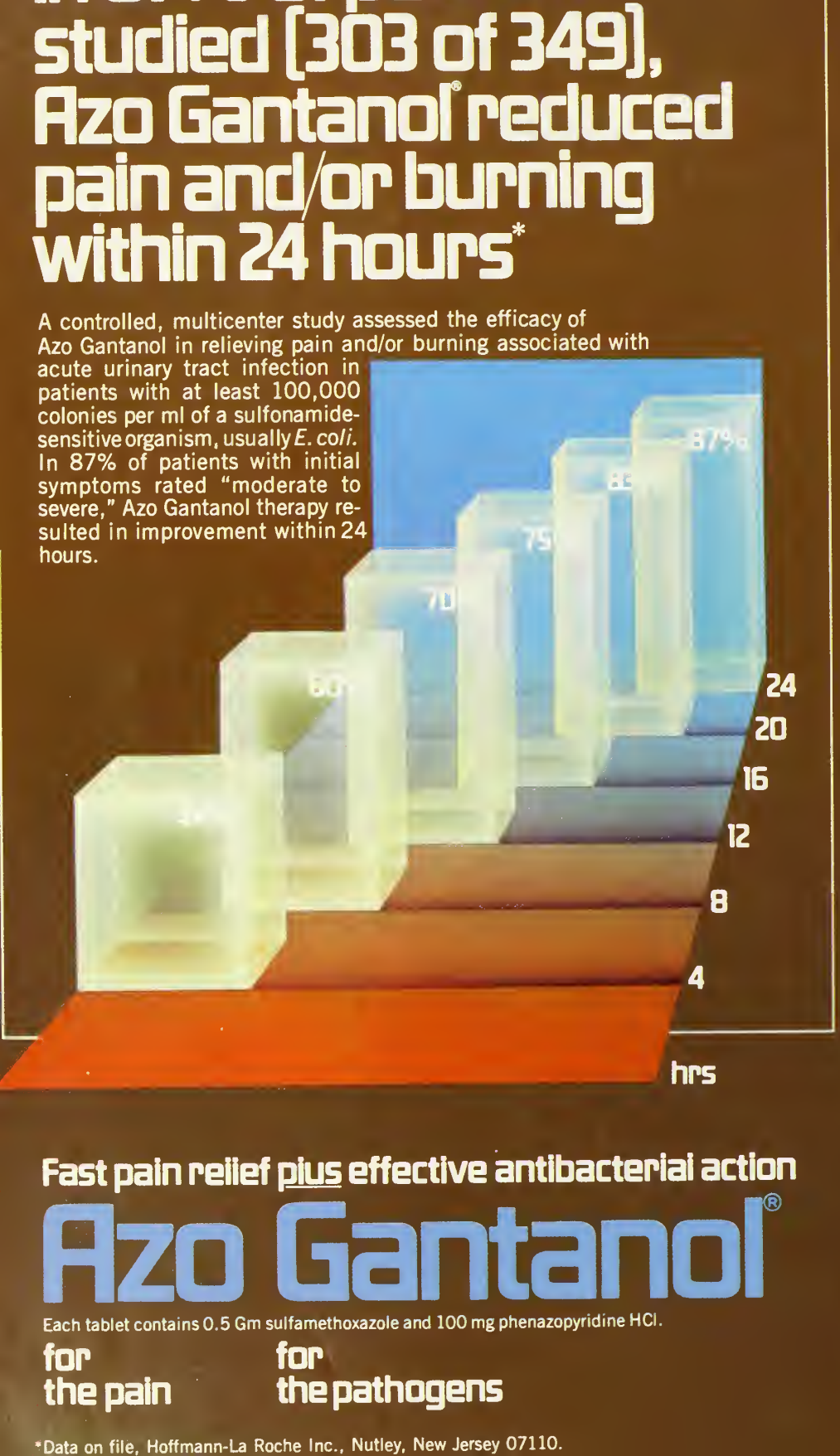
Merrell

For prescribing information see opposite page.

Important data on the pain of acute cystitis:

In 87% of patients studied [303 of 349], Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain

for the pathogens

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult com
uct information, a summary of which fo

Indications: In adults, urinary tract inf
complicated by pain (primarily pyelone
pyelitis and cystitis) due to susceptible
(usually *E. coli, Klebsiella-Aerobacter,*
coccus aureus, *Proteus mirabilis,* and,
quently, *Proteus vulgaris*) in the absen
obstructive uropathy or foreign bodies.
fully coordinate *in vitro* sulfonamide se
tests with bacteriologic and clinical re
aminobenzoic acid to follow-up culture
increasing frequency of resistant organ
the usefulness of antibacterials includi
fonamides. Measure sulfonamide bloo
variations may occur; 20 mg/100 ml s
maximum total level.

Contraindications: Children below age
fonamide hypersensitivity; pregnancy a
during nursing period; because Azo Ga
tains phenazopyridine hydrochloride it
dicated in glomerulonephritis, severe
uremia, and pyelonephritis of pregnan
disturbances.

Warnings: Safety during pregnancy no
Deaths from hypersensitivity reactions
tosis, aplastic anemia and other blood
have been reported and early clinical s
throat, fever, pallor, purpura or jaundic
dicate serious blood disorders. Freque
urinalysis with microscopic examinatio
ommended during sulfonamide therap

Precautions: Use cautiously in patient
paired renal or hepatic function, sever
bronchial asthma; in glucose-6-phosp
dehydrogenase-deficient individuals i
dose-related hemolysis may occur. Ma
adequate fluid intake to prevent cryst
stone formation.

Adverse Reactions: *Blood dyscrasias*
ulocytosis, aplastic anemia, thrombo
leukopenia, hemolytic anemia, purpu
thrombinemia and methemoglobinem
reactions (erythema multiforme, skin
Stevens-Johnson syndrome, epiderma
urticaria, serum sickness, pruritus, e
dermatitis, anaphylactoid reactions,
edema, conjunctival and scleral injec
sensitization, arthralgia and allergic
G.I. reactions (nausea, emesis, abdo
hepatitis, diarrhea, anorexia, pancrea
stomatitis); *CNS reactions* (headache
neuritis, mental depression, convulsi
hallucinations, tinnitus, vertigo and i
miscellaneous reactions (drug fever,
nephrosis with oliguria and anuria, p
nodosa and L. E. phenomenon). Due
chemical similarities with some goitro
uretics (acetazolamide, thiazides) an
glycemic agents, sulfonamides have
instances of goiter production, diures
glycemia. Cross-sensitivity with these
exist.

Dosage: Azo Gantanol is intended for
painful phase of urinary tract infectio
adult dosage: 2 Gm (4 tabs) initially,
(2 tabs) B.I.D. for up to 3 days. If pa
causes other than infection should be
After relief of pain has been obtained
treatment with Gantanol (sulfametho
be considered.

NOTE: Patients should be told that t
dye (phenazopyridine HCl) will color

Supplied: Tablets, red, film-coated,
ing 0.5 Gm sulfamethoxazole and 10
phenazopyridine HCl—bottles of 100

ROCHE

Roche Laboratories
Division of Hoffmann-
Nutley, New Jersey 07

ISMA Board Actions

(The following actions were taken by the ISMA Board of Trustees during their regularly scheduled meeting March 4, 1979).

Hospitals Covered Under PL 146

. . . Directed that the Indiana Insurance Commissioner be contacted for updated information concerning hospitals that are not qualified providers for purposes of coverage under Indiana's Medical Malpractice Act (PL 146). A hospital that is considered a "qualified provider" is one whose insurance carrier has paid the required 10% surcharge on its behalf to the Patients' Compensation Fund. The Indiana Hospital Association indicates that the following hospitals, for various reasons, are not presently considered qualified providers under PL 146: St. John's Hospital, Anderson; St. Francis Hospital, Beech Grove; St. Margaret Hospital, Hammond; Community Hospital, Indianapolis; St. Anthony Hospital, Michigan City; St. Joseph Hospital, South Bend; Terre Haute Regional Hospital, Terre Haute; Reid Memorial Hospital, Richmond; and St. Elizabeth Hospital, Lafayette.

Property Proposals

. . . Approved an ISMA staff investigation of the acquisition of the former Royal-Globe building, located four doors south of the present ISMA headquarters building. Staff was authorized to initiate negotiations to obtain an option on the property, which would provide an additional 10,000 square feet of space. The current headquarters building also provides approximately 10,000 square feet. Other options for acquiring more space are also being evaluated.

Chiropractic's Scope

. . . Nominated several ISMA members to serve on a committee that will determine what constitutes the scope of chiropractic. The action was brought on because of legal action being taken by chiropractors against the Medical Licensing Board of Indiana. Plaintiffs and defendants agreed that all actions on file against the Medical Licensing Board would be suspended pending submission of a written advisory opinion resolving the meaning of "chiropractic analysis," a term believed to be synonymous with "chiropractic diagnosis." Clarification is needed because the term applies to the Licensing Board's disciplinary powers over chiropractors licensed to practice in Indiana.

Impaired Physicians

. . . Thanked the Impaired Physician Committee for its work and suggested that the committee prepare a resolution for a policy determination by the 1979 House of Delegates dealing with substance abuse by physicians and their families. The action was taken based on a committee report outlining recommendations that include declaring as unethical and possibly illegal the practice of prescribing sedatives, tranquilizers—including minor tranquilizers—stimulants and narcotic derivatives for one's self or for one's family members.

Health Screening Programs

. . . Suggested that county medical societies be reminded that various health groups and associations are conducting screening programs across the state without physician input. County medical societies should be aware of any screening programs offered in their areas; such programs not meeting established criteria should be brought to the ISMA's attention for assistance in dealing with the problem.

Short Takes

. . . Endorsed the nomination of Frederic L. Schoen, M.D., to serve on the AMA Council on Long Range Planning and Development.

. . . Agreed that ISMA should participate in the "Art of Medicine" program sponsored by the I.U. Medical Center.

. . . Elected Martin O'Neill, M.D., to serve on the ISMA Executive Committee.

. . . Directed staff to develop appropriate letterhead stationery for each District desiring it.

. . . Directed that a policy statement be developed dealing with applications for disability or hardship for members.

. . . Directed that a 1973 policy statement concerning HMOs be removed from the ISMA Policy Manual.

. . . Authorized the Executive Committee to develop candidates for the position of State Health Commissioner.

. . . Directed a "no change" response to AMA concerning the AMA Principles of Medical Ethics.

. . . Tabled until its next meeting discussion on Reimbursement for Emergency Room Services under Medicaid; additional information is needed.

WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

CANCER CORNER

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

Community Cancer Care National Seminar

A national seminar on community cancer care will be conducted June 1-3 at the Hyatt Regency in Indianapolis. It will be sponsored by the Clinical Oncology Program and Methodist Hospital Graduate Medical Center of Methodist Hospital of Indiana, Inc.

Its purpose will be to encourage and give direction to developing community-initiated cancer care programs.

The seminar will:

- Clarify the importance of community-initiated cancer control efforts;
- Discuss results of three years of clinical research experienced by the seven National Cancer Institute Clinical Oncology Programs;
- Present the means of assessing existing needs and resources for community cancer care;
- Review components of a cancer program; and
- Examine different approaches to community cancer control.

Round table and open forum discussions will provide participants an opportunity to gain in-depth information. Discussion leaders will have experience in community cancer efforts.

This seminar will be directed to persons concerned about the care of cancer patients and their family members—physicians, nurses, hospital administrators, and allied health and community agency personnel.

Advance registration cards and hotel reservation cards may be obtained from Methodist Hospital Graduate Medical Center, Medical Education Department, 1604 N. Capitol Ave., Indianapolis 46202. Tel: (317) 924-8015.

Registration will be limited to the first 400 registrants.

Seminar topics will be as follows:

Friday, June 1:

Community Cancer Care
Cancer Data Systems
Reception—Indianapolis Museum of Art (evening)

Saturday, June 2:

The Clinical Oncology Programs
Other Approaches to Community Cancer Care
A Cancer Care Flea Market (evening)

Sunday, June 3:

Caring About Cancer

Breast Cancer National Conference

A national conference on breast cancer, sponsored by the American Cancer Society, will be conducted Sept. 6-8 at the Waldorf-Astoria Hotel, New York City.

Its purpose will be to improve the quality of care of the breast cancer patient by providing the primary care physician with a greater understanding of the factors that impact on management of this disease.

Experts in various disciplines will present the latest information on the cause, pathology, detection and diagnosis, and management of the patient at various stages of the disease. Social and psychological problems that concern the patient also will be explored.

Attendance will be limited to physicians and medical students. Advance registration is requested. There will be no registration fee. The conference is approved for 16 Category 1 credit hours.

For information write: Breast Cancer Conference, American Cancer Society, 777 Third Ave., New York, N.Y. 10017.

'Bladder Cancer'

In a reprint of this American Cancer Society professional education publication, Dr. Willet Whitmore, Jr. describes bladder cancer in a detailed and comprehensive manner. He is chief of Urologic Service, Memorial Sloan-Kettering Cancer Center.

Topics include incidence and epidemiology, diagnosis, classification systems and staging, treatment and results, and future prospects.

Copies are available from the American Cancer Society.

'The Hospice Concept'

This illustrated reprint should be of special interest and assistance to everyone involved in the care of the terminally ill patient. The authors discuss basic hospice characteristics, the role of nursing in hospice care, and symptom control utilizing pharmacologic, psychologic and spiritual aids.

Other subjects include the emotional relationship between patient, family and hospice personnel, bereavement follow-up, and hospice medical care costs.

Articles and charts list selected U.S. hospices, detail histories and programs of two individual hospices, and even discuss the psychological impact of hospice architecture.

Copies are available from the American Cancer Society.

April Is Cancer Crusade Month



ROCKWOOD
INSURANCE COMPANY OF INDIANA

Professional Liability Insurance Specialists

Physicians, Surgeons, Dentists

Hospital Professional Liability

Represented by:

Health Care Provider Insurance Agency, Incorporated

INDIANAPOLIS . . . Hadley-Mahoney Co., 3640 N. Washington Blvd. 46205
(317) 924-5331

MICHIGAN CITY . . Lindenmeyer Insurance Associates, Inc.
801 East Eleventh Street 46360
P.O. Drawer C
(219) 879-7301

SEYMOUR Wienco, Inc., Room 20, Vehslage Building
P.O. Box 518 47274
(812) 522-2931

SOUTH BEND Hepler-Smith Insurance, Inc.
511 West Colfax Avenue
P.O. Box 1875 46634
(219) 232-4889 (Toll Free 1-800-552-2910)

HMOs: Better Than Fee-for-Service System?

DONALD F. FOY
Executive Director
Indiana State Medical Association

The Department of Health, Education and Welfare is making a concerted effort to promote and increase the number of federally qualified and subsidized Health Maintenance Organizations (HMO). I think it is time to correct several misconceptions about HMOs.

According to the Federal HMO Act (P.L. 93-222), signed into law in 1973, an HMO is an "organized, fiscally sound, legal entity, which provides and/or arranges for a comprehensive range of inpatient and outpatient services to a voluntarily enrolled group of subscribers who made (or on whose behalf is made) prepaid, fixed and uniform payments to the HMO on a periodic basis."

The Act had the force of putting the HMO at risk for providing the agreed upon services within the fiscal constraints of the agreed upon per capita revenue. It required federally supported or approved HMOs to have an annual "open enrollment" period for everyone wishing to join regardless of health risk; and to establish the same per capita rate for all enrollees regardless of their health status (a system known in insurance parlance as "community rating").

Many individuals involved with HMOs feel that the extensive benefit package requirement of the 1973 Act, coupled with open enrollment and community rating, resulted in per capita rates that were too expensive. They argue that this has put HMOs in an unfair position when competing with traditional health insurance plans covering fees for services and so has impeded the growth of the HMO movement.

Thus, it has been claimed that the resulting high HMO premium created a great potential for failure because people would not want to make the increased out-of-pocket payment even though they might receive more benefits than under traditional health insurance plans. As a result, in 1976 Congress passed amendments to the original Act, which loosened considerably the requirements for federal qualification for an HMO. However, the most controversial amendment exempted all HMOs in existence for less than five years or had 50,000 subscribers (members) from the open enrollment requirement.

According to many persons involved with HMOs, the quality of care they provide is really determined solely by the degree to which a sound quality assurance program exists within the individual HMO. But DHEW has yet to define specific standards for HMO quality assurance; the fact that quality assurance standards vary greatly concerns HMO critics who maintain that HMOs will be inclined to "skimp" on their quality of care by "undertreating" patient needs.

The "skimping" argument is answered by HMO proponents who cite Section 1301(c)(8) of the HMO Act that requires qualified HMOs to conduct on-going quality assurance programs. But HMO critics quickly point to *A Report to the Congress*, released in June 1978 by the U.S. General Accounting Office, which surveyed several federally qualified HMOs and their compliance with the qualification regulations. With regard to quality assurance, the report concluded:

" . . . HEW, and therefore HMOs, still lack specific, definitive standards for quality assurance programs. As a result, HMOs have designed programs which include a variety of features. To become qualified, an HMO must have a planned quality assurance program; however, many of the HMOs we evaluated had not fully implemented their programs at the outset of operations. As of early 1978, HEW had not made site visits to assess HMOs' compliance with quality assurance requirements and had not finalized procedures for assessing compliance."

A March 28, 1978 study released by Inter Study (a Minneapolis-based HMO study group headed by Paul Ellwood, M.D.) for the National Chamber Foundation, stated: "Although there are no generally accepted measures of quality, evidence suggests that HMOs provide equal or higher quality care than the traditional system."

Other studies show no difference between the amount of treatment and preventive care HMO members and fee-for-service patients receive, except for hospitalization. Some of these studies indicate HMO patients go outside of their group plan for 10% or more of

eir medical care, which critics cite as sug-sting some dissatisfaction.

Many HMO spokesmen maintain that MOs are cost effective because of decreased spital utilization by members, both in terms lower admission rates and shorter lengths of ay. Critics of the HMO program, however, ntend that lower hospital use in an HMO rives not so much from efficiency of practice, it does from actively seeking to enroll a ung, healthy population of subscribers; they o question where appropriate utilization ds and under-utilization begins.

Claims of HMO cost savings are usually lculated on a basis of hospital days used per 00 members. From February to August 77, a census of HMOs was conducted by e Group Health Association of America. is census determined that, overall, the num-r of hospital days per 1,000 members (in e 165 HMOs then in existence) was 458, mpared to 800-1,000 for traditional-type surance plans. According to a June 1978 W ENGLAND JOURNAL OF MEDICINE, these wer HMO hospitalization rates are probably due primarily to lower admission rates rather than to lower lengths of stay.

In a report to the Congress, published in June 1978 by the U.S. General Accounting Office, it is suggested that lower hospitalization days per 1,000 HMO members may be attributed to population selection. Qualified HMOs are supposed to enroll everyone, regardless of health status, via the open enrollment requirement; but because this requirement may be waived for a period of five years, it is implied that HMOs only market coverage to young, healthy subscribers who use hospitals less.

To evaluate these claimed benefits and limitations, the AMA has initiated an objective information gathering program on the operation of different types of HMOs. Through a series of site visits to operating examples of each HMO model, the AMA will assess the impact of these programs on quality, availability, and costs of medical care as it is perceived by involved and non-involved physicians, patients, and administrators.

The findings of this assessment will be conveyed to the AMA's House of Delegates in future reports, so as to assist physicians in making informed judgments on these practice modes; after all, it is primarily the physician who will be called upon to deliver the care that others are promising.

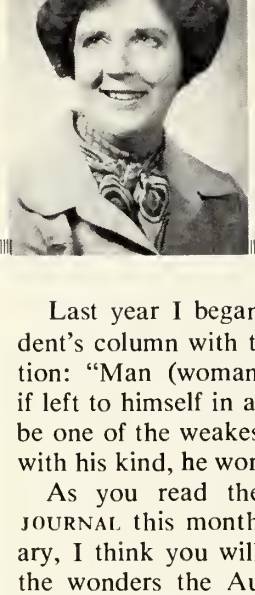
The AMA is convinced that the most valid information on the efficacy of HMOs will result from allowing them to compete with other delivery and financing mechanisms in a health care market free of artificial restraints on or advantages to any one approach, and strongly supports the concept of free market competition.

For these reasons, organized medicine supports the pluralistic health system within which prepaid group programs (HMOs) have long existed successfully without substantial federal subsidies. Since the "jury is still out" on the efficiency of HMOs vis-a-vis the more traditional fee-for-service system, further study is needed.

To facilitate such an evaluation, both approaches must be allowed to exist in an atmosphere where neutral public policy and fair market competition prevail.

AMA Appraising HMOs

The AMA is assessing the impact of health maintenance organizations (HMOs) on the quality, availability and cost of health care. The project includes on-site visits to 15 HMOs of three types —five groups, five staff, and five independent practice associations. The on-site visits began in February and will continue through May. During site visits administrators, physician members, subscriber group representatives and HMO medical directors are being interviewed. Local physicians not affiliated with the HMOs are also being interviewed at each site. A report on the project will be submitted to the AMA House of Delegates at the 1979 annual meeting.



AUXILIARY REPORT

Ruth (Mrs. G. Beach) Gattman
President, ISMA Auxiliary

Last year I began my first Auxiliary president's column with this Daniel Webster quotation: "Man (woman) is a special being, and if left to himself in an isolated condition would be one of the weakest creatures; but associated with his kind, he works wonders."

As you read the special section of THE JOURNAL this month that features the Auxiliary, I think you will learn a little more about the wonders the Auxiliary works in Indiana. Special thanks for their efforts in putting this feature together go to Mrs. Frank Throop, Anne, our communications chairman, and to Marty Badger, managing editor.

Our annual House of Delegates meeting will be held April 17-19 at the Goshen Holiday Inn. The theme of this year's convention is the Country Store. Members have been asked to bring hand-made items to be sold at the Country Store for the benefit of AMA-ERF. The Country Store will be set up in the hospitality suite for members to gather around the old pot-bellied stove for some real northern hospitality. Members of the Elkhart County Medical Auxiliary, assisted by contributions from the Elkhart County Medical Society and the 13th District Medical Society, are serving as hosts—all under the very capable leadership of Mrs. Donald Miller, Mary Lois, chairman.

We have planned a stimulating and enjoyable convention. Keynote speaker will be Mrs. Quentin L. Quickstad, AMA Auxiliary AMA-ERF chairman. Our Wednesday dinner at Elcona Country Club, Elkhart, to which husbands and guests are invited, will highlight the convention.

Four county auxiliaries have been organized 50 years or more and will be recognized at the coming House of Delegates. A special recognition will be given to sixteen 50-year members of the Auxiliary. These county auxiliaries and their 50-year members deserve our thanks and congratulations for their faithful support. Mrs. Edsel Reed, historian, has spent a busy year gathering information and planning this recognition. Thanks, Allie, for a job well done.

If I could sum up the activities of the ISM Auxiliary for the past year in one wor *communication* would be my choice. Beginni with our House of Delegates in 1978 whe it was stressed that "*You* can make the di ference" in your county auxiliary, and lat at our Area Workshops where our keyno speaker used Communication as the emphas of her talks, the year has been filled with goo communication.

Each county auxiliary has been personal visited or contacted by a member of t Executive Committee during the year. O communication with the ISMA has been e larged and strengthened through joint partic pation in programs, commissions, meetings a workshops.

Our work in immunization, requested by t Governor and approved by the ISMA and t Auxiliary, has been another method of pr viding good communication between the sta and county auxiliary.

The AMA Auxiliary has provided the lea ership and assistance needed to make our j in Indiana easier. Confluence, regional mee ings for leaders, and the AMA conventi have played a vital force in preparing o leaders for their jobs.

A new format, and soon a new name, f our HOOSIER DOCTOR'S WIFE has highlight the importance of keeping our members i formed.

Through it all we have attempted to stre the importance each member plays in co tributing to the Auxiliary, a strong, viable o ganization. It remains dedicated primarily assisting you, the ISMA, with programs for t advancement of medicine and public healt Though our approach to problems may chang our primary objective will not.

If the past year has brought a new insig into the work of the Auxiliary and has add a new sparkle to its glow, then for me it h been successful. Thank you for making th such a memorable year for Beach and mysel It has been an honor to serve as president.

When the indications surface...



NEOSPORIN® Ointment

(Polymyxin B-Bacitracin-Neomycin)

Wellcome
Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin) in special white petrolatum qs; in tubes of 1 oz, 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically,* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, furunculosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis), traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically,* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

FUTURE FILE

Neurology Symposium

A day-long neurology symposium will be conducted at Ball Memorial Hospital in Muncie April 11.

For information on this CME course, contact the hospital's Department of Medical Education, 2401 University Ave., Muncie 47303. Tel: (317) 747-3366.

Alcohol, Drug Abuse Course

A four-day course for practicing physicians will be held June 18-21 at the University of Utah Hospital Medical Center. The workshop will emphasize medical management and rehabilitation of alcohol and drug abusers. Lectures, demonstrations and small group discussions will be included. Attendance is limited. Tuition is $200.

Twenty-five hours of Category 1 approved credit is offered by the American Academy of Family Physicians. As an organization accredited for continuing medical education, the U. of U. College of Medicine and the American Medical Society on Alcoholism certify that the Special Course for Physicians meets the criteria for 25 hours credit in Category 1 of the Physician's Recognition Award of the American Medical Association, provided it is used and completed as designed.

For further information, contact James R. Swenson, M.D., P.O. Box 2604, Salt Lake City, Utah 84110.

Emergency Services Deployment

Wayne State University will conduct a one-day seminar in August on Emergency Services Deployment. Problems in resource allocation, the use of techniques and computer packages, computer programs, and both large and small area coverage will be discussed. The program is designed for fire chiefs, police chiefs, and city managers as well as EMS personnel. Two previous similar seminars have drawn participants from all over the country. For full information write Joanne Juhl, College of Engineering, Wayne State University, Detroit, Michigan 48202.

Postgrad Endocrinology Course

The American College of Physicians will sponsor a five-day postgraduate course April 23-27 in Rochester, Minn. The course is entitled, "Diagnostic and Therapeutic Concepts in Endocrinology—1979."

The course is accredited for 34¼ hours of Category 1 credit.

For information, write the Registrar, Postgraduate Courses, American College of Physicians, 4200 Pine St., Philadelphia 19104.

CONTINUED ON PAGE 239

Librax®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

Please consult complete prescribing information, a summary of which follows:

Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.**

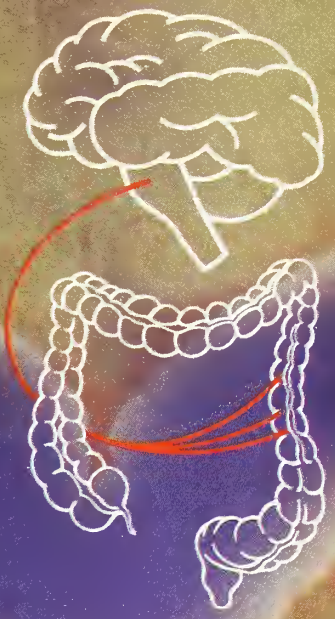
As with all anticholinergics, inhibition of lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment, blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

Roche Products Inc.
Manati, Puerto Rico 00701



In treating irritable bowel syndrome*
nhance your therapeutic expectations with

Librax®

Each capsule contains
5 mg chlordiazepoxide HCl
and 2.5 mg clidinium Br.

antianxiety/antispasmodic/antimotility

Librax is unique among G.I. medications in providing the specific antianxiety action of LIBRIUM® (chlordiazepoxide HCl) as well as the potent antispasmodic and antimotility actions of QUARZAN® (clidinium Br) for adjunctive therapy of irritable bowel syndrome.

ROCHE

Librax has been evaluated as possibly effective for this indication.
Please see brief summary of prescribing information on preceding page.











The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).

© 1978 The Upjohn Company













Motrin 400 mg TABLETS
ibuprofen, Upjohn

The confidence that comes from experience—one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

J-6857-4

The confidence that comes from experience—
one more reason to prescribe

Motrin 400 mg TABLETS
ibuprofen, Upjohn

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness*, headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; *3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

How Supplied

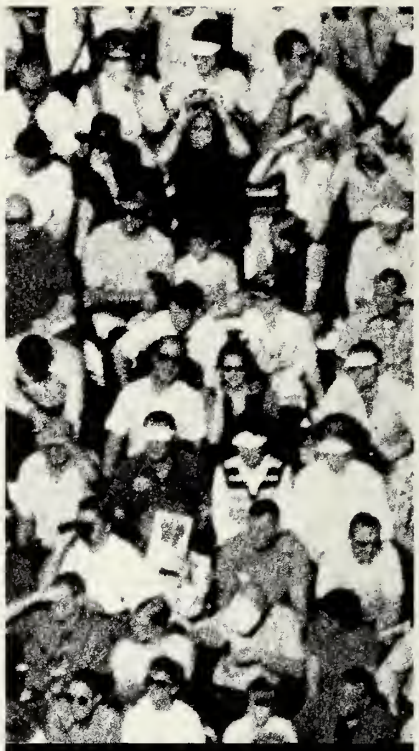
Motrin Tablets, 300 mg (white)	
Bottles of 60	NDC 0009-0733-01
Bottles of 500	NDC 0009-0733-02
Motrin Tablets, 400 mg (orange)	
Bottles of 60	NDC 0009-0750-01
Bottles of 500	NDC 0009-0750-02
Unit-dose package of 100	NDC 0009-0750-06
Unit of Use bottles of 120	NDC 0009-0750-26

Caution: Federal law prohibits dispensing without prescription.

NIM-3

Upjohn

The Upjohn Company
Kalamazoo, Michigan 49001



ALDOMET®
(METHYLDOPA | MSD)
TABLETS: 500 mg, 250 mg, and 125 mg

MSD
MERCK SHARP & DOHME

FUTURE FILE

CONTINUED FROM PAGE 234

Child Care Conference

The Fourteenth Annual Indiana Multidisciplinary Child Care Conference will be held May 16-17 at the Marriott Inn, Indianapolis.

The speakers and their subjects include: Dr. William E. Bell—Pediatric Neurology; Drs. Paul DeRosa and Richard Lindseth—Pediatric Orthopedics, Parts I and II; Dr. Heinz Eichenwald—Pediatric Infectious Disease, Parts I and II; Drs. Arthur Norins and Nancy Esterle—Pediatric Dermatology; Drs. Morris Green, James Simmons and Ernest Smith—Behavioral Pediatrics, Parts I and II; Dr. Adele Hofmann—Adolescence, Parts I and II; Dr. William E. Lattanzi—Fluid and Electrolytes. The banquet speaker will be Dr. Albert J. Solnit—"Before and Beyond the Best Interests of the Child".

Further information may be obtained by writing to Dr. Morris Green, Department of Pediatrics, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis 46223.

ACS Offers 'Fractures' Course

"Fractures and Other Trauma" is the subject of the 13rd Annual Postgraduate Course of the American College of Surgeons Chicago Committee on Trauma. The course is scheduled for May 9-12 at the Radisson Chicago Hotel. A distinguished faculty of 25 members will present lectures and demonstrations.

The registration fee is $185. For allied health personnel the fee is $60. Residents and interns with a letter from their chief will pay only for the lunch. The fee includes three luncheons and a chairman's reception, to which wives are invited. Write to American College of Surgeons, 55 E. Erie St., Chicago 60611.

Calendar of Events

Apr. 15—Easter Sunday
Apr. 21-22—Third District, Clarksville
Apr. 23-25—Washington Visit (Leadership)
May 2—Sixth District, Rushville
May 6—Board of Trustees
May 9—Fourth District, Columbus
May 13—Mothers Day
May 16—I.U. Alumni Day
May 17—First District, Evansville
May 20—Commission on Medical Education
May 20—Subcommission on Accreditation
May 20—Commission on Public Relations
May 23—Seventh District, Martinsville
May 28—Memorial Day
May 30—Fifth District, Terre Haute

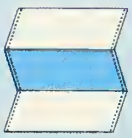
Fine Tailors

Medical Data Systems® are tailored to the individual needs of groups, clinics and labs. Begin with the basic service bureau concept and phase-in your own in-house operation. In the interim, S-Tek takes full responsibility for installation, education and training and procedures.

S-Tek Computers Services—
The Data Processing Tailors

MEDICAL DATA SYSTEMS®

Call or Write Ken Williams,
Vice President of Marketing



S-Tek
COMPUTER SERVICES, INC.
P.O. BOX 328 TERRE HAUTE, IN 47808 812-232-1385

Medical Data Systems,® a registered trademark of S-Tek Computer Services Inc.

THE AUXILIARY

of the

Indiana State Medical Association,

even though its almost 52 years old,

is young and vibrant

in its approach

to meeting the challenges

of modern medicine.

Auxilians are admonished to "Stand Up and Be Counted!" Another slogan boasts, "We Can Do More Together!" And since you can't knock success, you just have to believe that the more than 2,600 members of the ISMAA are an articulate, dynamic group who are ready to take on all comers.

It all began Sept. 8, 1927 when a small group of doctors' wives, representing five or six Indiana counties, gathered together to form the Auxiliary, under the leadership of Mrs. Frank C. Cregor of Indianapolis. Since those early days, the Auxiliary has mushroomed into a giant that encompasses 46 of the state's 81 county medical societies.

The Auxiliary gets the job done. What they do isn't easy—perhaps therein lies the challenge. The Auxiliary isn't just a social organization consisting of people getting together for the familiar kaffee klatsche. They help the ISMA in its program for the advancement of medicine and public health—they're active in fighting for favorable legislation, learning how to do almost anything better, getting school kids immunized, raising funds for medical students. In short, they'll take on anything the ISMA asks of them.

The Auxiliary's key to success is communication— vital to their mission of providing meaningful contributions toward maintaining the highest standards of health care for all Indiana citizens.

They aren't perfect; but they recognize their weaknesses, try to correct them and, in the meantime, capitalize on their strengths.

The Auxiliary has the bull by the horns —if you doubt it, read on. If you can, join up!

'We Can Do More Together'

Each year the Auxiliary's House of Delegates meets to conduct official business. This year they will gather at the Holiday Inn in Goshen April 17-19. During the convention they will thank Ruth Gattman, president, for taking a year out of her life to serve the Auxiliary—she logged 40,000 miles on her car traveling all over the state—and to honor the incoming president, Charlotte Bennett of Evansville.

Members of the Elkhart County Medical Auxiliary are hosting the 1979 convention under the leadership of Mary Lois Miller of Elkhart, chairman. Many guests will come and go during the meeting, but the Auxiliary's favorite guests each year are the representatives from SAMS—the organization for spouses of medical students. They are shepherded around by Lelia Chernish and Anne Pantzer, coliaisons between the Auxiliary and SAMS.

SAMS members attend monthly meetings and lend both help and moral support to the Auxiliary. One of their projects is controlling a short-term loan fund available for medical students who need help with an unexpected bill; there are no strings attached and no interest is charged. They also provide toys and equipment for Riley Children's Hospital. They work hard and play hard. Dr. and Mrs. Frank B. Throop of Indianapolis recently hosted a chocolate and candy cooking class for them; last summer, Dr. and Mrs. Hans Geisler of Indianapolis hosted a barbecue and swim party.



Dr. and Mrs. Hans Geisler of Indianapolis hosted a barbecue and swim party for SAMS members last summer.



Nutrition

Breast Exams

CPR



Immunizations

Dr. Robert L. Parr, center, chairman of the ISMA Ad Hoc Committee on Immunizations, discusses an immunizations survey form with Beth Dallas of Indianapolis, left, and Wilma Jean Scamahorn of Pittsboro.

'Help Your County to Better Health'

"Help Your County to Better Health" is the slogan challenging county auxiliaries to present the positive side of medicine through good community health programs.

Projects range from LaPorte's breast self-examination clinics for mothers and daughters to a CPR television documentary produced by Vanderburgh County. (All Auxilians are urged to become CPRs—and at least 27 county auxiliaries now have members so qualified.) The Lake County auxiliary was instrumental in having the Heimlich Maneuver printed on milk cartons.

The Auxiliary's biggest health project deals with surveying the immunization status of school children throughout the state.

Last year, Governor Bowen appointed the Auxiliary as the lead voluntary organization for immunization efforts in Indiana. Since then, the Auxiliary has been intensively involved in this project, which deals with assisting schools in auditing student immunization records. The State Board of Health and the Indiana Immunization Action Committee are serving in an advisory role. To date, 41 school systems have asked the Auxiliary for help.

Of the immunization program Mrs. Gattman said the work is especially appropriate this year because the United Nations has designated 1979 as the International Year of the Child. "We're hoping these audits will show that Indiana parents are ahead of other states in having their children immunized against DPT, polio, rubella, rubeola and mumps," she said.

The Auxiliary is currently checking immunization levels of students in grades 10 through 12, according to co-chairmen for the project Carolyn Moheban of Shelbyville state health chairman, and Anne Throop of Indianapolis, state communications chairman.



Dorothy Schiller, left, Auxiliary first vice-president, talks with a fellow Auxilian as Anne Throop, communications chairman, and Ruth Gattman Auxiliary president, discuss progress of immunization program.

AMA-ERF: In Support of I.U. School of Medicine

Three board members are active- involved in creating projects to ise funds for AMA-ERF. They e Lois Golden and Betty Fultz of ffersonville and Alfrieda Mackel Fort Wayne, chairman of purse les.

The Auxiliary has raised a large nount of money from sales of onogrammed purses, as well as atches, books, stationery and her merchandise. Almost all of e county auxiliaries have a major oject each year to raise funds for MA-ERF.

Ruth Gattman is leaving office is month in a flurry of activity rrounding her House of Delegates Country Store," which will feature ndmade and donated items from uxiliary members to be sold for e benefit of AMA-ERF.

At the Auxiliary's winter board meeting, Dr. Steven C. Beering, Dean of the I.U. School of Medicine, talked to the group about the importance of the unrestricted funds—the only such funds—that the medical school gets from the AMA-ERF projects. Each dollar contributed to the student loan fund makes $12 available for loan to the medical student. He pointed out that the establishment of the Department of Family Practice might not have been possible without Auxiliary AMA-ERF support. Indiana is the only state in the nation having such a department built largely with those funds—a source of pride to Auxiliary members, and solid proof of an investment in the future of medicine.

The Auxiliary has regularly received national recognition for its contribution to AMA-ERF.



Dr. Steven C. Beering, Dean of the I.U. School of Medicine, discusses AMA-ERF funds with Auxilians.



lvia Schneider of Columbus, left, and Elfrieda Mackel Huntertown, AMA-ERF purse chairman, discuss the onogrammed purse held by Mary Lois Miller of Elkhart.

'Meet Your Legislator' Day

In her inaugural message last April, Ruth Gattman, 1978-79 president of the Auxiliary, pointed out the steadily increasing government intervention in the practice of medicine. She urged Auxiliary members to become informed on medical legislation and to respond promptly to AMA Auxiliary L.E.G.S. alerts.

This year Bonnie Egnatz of Munster, legislation chairman, arranged a day with the legislators Feb. 13. Auxilians met for a luncheon on that day at the Hyatt Regency in Indianapolis; Beth Bowen, wife of the Governor and a former Auxiliary president, was the guest speaker.

Later, a workshop served to prc vide an update on proposed medica legislation and the Auxilians toure the Capitol Building to see the legis lature in action. The Auxilians wer given an explanation on how a bi becomes law and on how to contac legislators. Letter-writing is one c the key ways Auxilians help in th legislative process. One recent suc campaign concerning the Hospita Cost Containment Act was ex tremely effective in bringing ISMA' position to the attention of legis lators.

The ISMA topped off the da with a reception for the Auxiliar members and legislators.



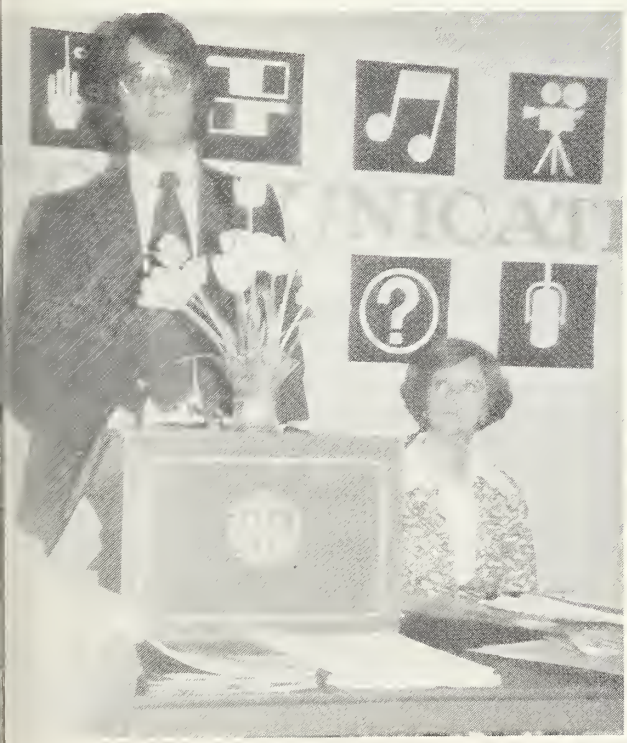
Ginny Marvel, left, and Charlotte Bennett, Auxiliary president-elect, meet with State Rep. Gregory D. Server during the "Meet Your Legislator" day in February. All three are from Evansville.

Area Workshops: To Communicate Is Their 'Bag'

Area workshops are arranged by ea vice-presidents. Carol Benson Elkhart handles the Northern rea, Marianna Irwin of Indian- olis has the Central Area, and onnie Meyer of Sellersburg has the outhern Area. They serve as aison between the county auxil- ries and the Auxiliary president. ommunications is their "bag."

Mrs. Torrence P. B. Payne, MA Auxiliary communications airman, was the featured speaker at the Northern and Southern Area workshops last May. Some 125 auxiliary leaders representing 26 counties participated and benefited from Mrs. Payne's presentation.

Also last May, Mark Miles, IMPAC coordinator, visited area workshops and stressed the importance of political involvement. He showed an audio-visual presentation that explained what physicians have at stake in the political arena.



Mark Miles, IMPAC coordinator, challenges Auxilians to become politically involved during an area workshop emphasizing the art of communications. At right is Ruth Gattman, Auxiliary president.



rs. Torrence P. B. Payne, left, AMA Auxiliary com- unications chairman, shows AMA public relations liter- ure to Anne Throop, ISMA Auxiliary communications airman, during a workshop.

Ready to Meet the Challenge

The Auxiliary emphasizes the importance of communication at all levels. One of their most important communications tools is their quarterly newspaper, HOOSIER DOCTOR'S WIFE. A new format was introduced this year, largely through the efforts of Marcia Laker of Fort Wayne, the editor. A new name is also under consideration. The staff includes a feature editor, circulation manager and representatives of the Northern, Central and Southern Areas. An editorial committee works closely with the Auxiliary president to keep members informed of relevant county, state and national news.

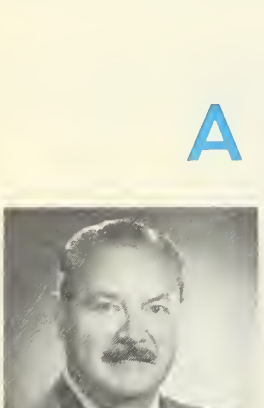


Marcia Laker of Fort Wayne, editor of the Auxiliary's newspaper, chats with Charlotte Bennett, Auxiliary president-elect.

Besides communications, much more is needed to keep the Auxiliary successful. For example, Marilyn Lahr of West Lafayette performs an invaluable service as recording secretary and Karen Schleinkofer of Fort Wayne is the treasurer. Mary K. Stanley, immediate past president, is chairman of the nominating committee.

The Auxiliary is people working and communicating with a common goal. It's a never-ending process—but the Auxilians stand ready to meet that challenge.

A Salute to the Auxiliary



Arvine G. Popplewell, M.D.
President
Indiana State Medical Association

ISMA continues to be most grateful to our Auxiliary for their continued efforts to complement our efforts to improve the health of the citizens of Indiana. Indeed, the assumption of leadership in ongoing programs to improve immunization of our young folks and enhance programs in medical education at Indiana University has been most successful.

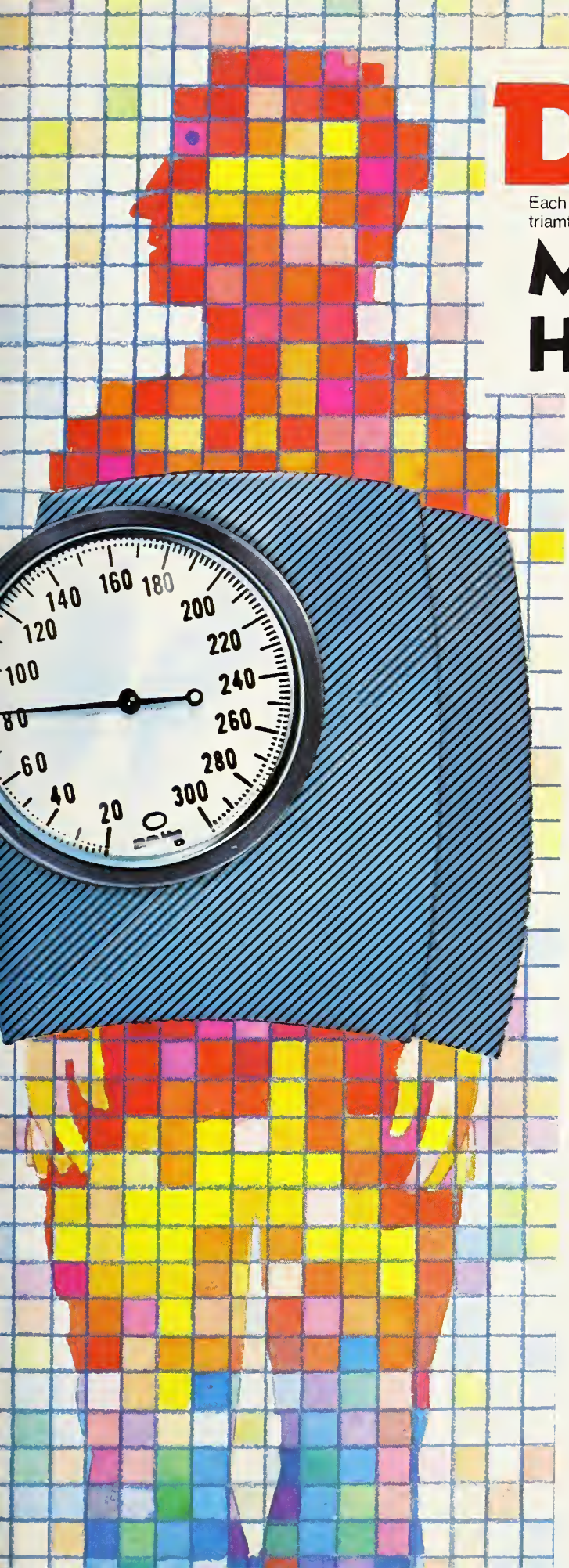
Hopefully, we can improve on our relationship by better communications through more joint participation in matters of great importance to the membership of ISMA. As was Jim Harshman, I am committed to expansion and strengthening of our relationship.

We hope to fully develop our program of having Auxiliary members attend our commission and committee meetings to have your ideas and proposals impact on our decisions and to relate back to your membership.

Of major importance is the continued improvement of our key person contact program to enable us to be better informed and relate our feelings to our elected officials at home and in Washington; yes, and also to influence our friends and neighbors to do the same. With the ever increasing involvement of government at all levels into almost every aspect of health care, much work is needed to avoid, insofar as possible, further encroachment on the free enterprise system and interference with the confidentiality of patient information.

Attempts to limit the federal deficit will bring decrease in monies available from the federal government for medical education. This may not be all bad for it may reduce federal control. It will mean, however, that your efforts for AMA-ERF will be increasingly important and much more will be needed.

ISMA salutes you and thanks you for your help!



Dyazide®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Makes Sense in Hypertension*

Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:

* **Warning**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K+ frequently; both can cause K+ retention and elevated serum K+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

SK&F CO.
a SmithKline company
Carolina, P.R. 00630

When painful spasm is the presenting symptom . . .



in the functional bowel/irritable bowel syndrome*

Bentyl®

(dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity
with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

n this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

420 (Y736A) MNR-804

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention, blurred vision and tachycardia; palpitations; mydriasis; cycloplegia, increased ocular tension, loss of taste, headache, nervousness, drowsiness, weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg. *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Commentary

The 96th Congress— A Time To Cut the Cord

RICHARD L. LESHER
President
U.S. Chamber of Commerce

Congress has reconvened, and for once the public can look forward to the new session with a feeling of hope rather than despair. Thanks to growing pressure from inflation-weary taxpayers, Congress seems to have finally gotten the message—it's time to help the millions of people who are trying to hold down productive jobs and pay the government's bills.

Obviously this conversion is long overdue, but it's still very good news. And if Congress can translate its more responsible attitude into substantive legislation limiting government spending, ending needless, costly regulations and providing genuine across-the-board tax reduction, then our economy can be restored to sound health.

But it won't be easy, because we have subjected the private enterprise system to such abuse for so long. It will take more than one year of penance to cleanse that kind of neglect.

In effect, the members of the 96th Congress will have their work cut out for them. They must reverse the record of irresponsibility reflected by the liberal spending attitude which has grown almost every year for the past 50 years. During the past five decades, the federal budget has been in balance only nine times, and only once since 1960. And because of this unchecked growth of government, the rate of individual taxation has climbed to confiscatory levels. There was a time when Americans saved for their old age; now it is all they can do to save for April 15th. This is a problem Congress must tackle immediately.

Because taxpayers have been the target of so many false promises, they tend to discount political rhetoric. Yet, if Congress is to succeed as I hope it will, and exercise the leadership the country needs, then it must regain the support of the public by setting an example and allowing its actions to speak louder than its words.

Let me be more specific. Americans are being asked to sacrifice, to tighten their belts, to cut out waste, to conserve more energy. Should not Congress be prepared to do the same?

)ESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltesto-terone is an oil soluble androgenic hormone. **NDICATIONS:** In the male: 1. Eunuchoidism and unichism. 2. Male climacteric symptoms when these are econdary to androgen deficiency. 3. Impotence due to ndrogenic deficiency. 4. Post-puberal cryptochidism vith evidence of hypogonadism. Cholestatic hepatitis vith jaundice and altered liver function tests, such as ncreased BSP retention, and rises in SGOT levels, have een reported after Methyltestosterone. These changes ppear to be related to dosage of the drug. Therefore, in he presence of any changes in liver function tests, drug hould be discontinued. **PRECAUTIONS:** Prolonged osage of androgen may result in sodium and fluid etention. This may present a problem, especially in atients with compromised cardiac reserve or renal isease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence s due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

dditional indications: Replacement therapy. When androgen deficiency is the cause of: iale climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



e for new double-blind study reprints and samples.

ROWN **THE BROWN PHARMACEUTICAL CO., INC.**
0 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

UNNECESSARY SURGERY: Fact or Fiction?

The public is being misled by a Congressional subcommittee which has charged American physicians with performing unnecessary surgery, according to Dr. Tom E. Nesbitt, AMA president. He said the House Subcommittee on Oversight and Investigation is apparently seeking to expand the regulation of medicine, but there is no evidence that such regulation will improve quality or reduce the cost of care.

"The subcommittee based its conclusions on studies that were never intended to be applied to the nation as a whole," Dr. Nesbitt said.

"The researchers who conducted the studies used by the subcommittee specifically said that their conclusions could not be extended to the U.S. as a whole. The studies were of small populations with no attempt to duplicate the statistical make-up of the country. To apply these results to the total American health care industry can only mislead the public. I do not say that there is no unnecessary surgery in the U.S.—doctors are not, after all, infallible—but I do say it is wrong to exaggerate the situation."

The conclusions of the report call for mandatory second opinions for all patients advised by their physicians to have surgery.

Both the AMA and the Indiana State Medical Association support voluntary second opinion programs. Both have long recommended consultation between physicians for any difficult medical procedures.

Dr. Nesbitt said, however, that formal second opinion programs are only in the experimental stages and do not represent the panacea that the subcommittee report makes them. So far these programs have dealth only with small numbers of people and a limited number of procedures. Although some surgery has been deferred, the ultimate effect on the patient of this deferral has yet to be assessed.

Data are also not available to indicate how much surgery that was initially thought not necessary was eventually performed. Furthermore, many second opinions suggest that additional medical follow-up be performed and then the patient's conditions be reviewed for further treatment.

"It appears that the subcommittee, in recommending mandatory second opinion programs from Medicare and Medicaid patients has also applied in this section o its report, limited, early results from a few studies to the nation as a whole without justification," Dr Nesbitt added.

The conclusion of the report also called into question the effectiveness of Professional Standards Review Organizations, even though most of these new review bodies have been operational for less than two years and recent evaluations have cited their usefulness.

The report also criticized the AMA in particular, and organized medicine in general, for their presumed lack of concern for the problem of unnecessary surgery. In reply, Dr. Nesbitt pointed out that the AMA has led the way in developing review criteria for the most commonly performed operations and has consistently supported peer review mechanisms for medical and surgical care. The AMA-prepared criteria are used as guidelines by PSROs.

In addition, the AMA is currently under contract with the DHEW to produce criteria for surgical procedures.

Editorially Speaking:

HEALTH POLITICS

Now that national health insurance has become the centerpiece issue for the forces promoting a Teddy Kennedy presidency, we assume health politics will become more prominent in the public debate. We fear the quality of the discussion will not rise above the low levels of the past.

This thought occurs as we read about a congressional report accusing the nation's surgeons of killing 10,000 patients a year with unnecessary surgery. The report, by the Subcommittee on Oversight and Investigations of the House Interstate and Foreign Commerce Committee, revises a 1974 estimate, which had the surgeons slaughtering 12,000 people. The American Medical Association, apoplectic about the earlier report, was only a little less so over the revision.

Indeed, it does seem rather gross for a political body to indict an entire profession on the basis of evidence that has to be, by its very nature, inconclusive and debatable. What, after all, is an "unnecessary operation"?

Well, according to the committee, the majority of tonsillectomies in 1977 need not have been done. That may well be true, but the argument about tonsillectomies has been raging in medicine for years, with some doctors for and some against. Those that are for are not always surgeons and thus presumably are not motivated by the inordinate greed which national health politicians attribute to all doctors.

We are asked to take on faith that a group of investigators in the Rayburn Building have learned more about the pathology of diseased tonsils than doctors know. If we are not ready to propound a doctrine of infallibility for the nation's doctors we are even less ready to do so for congressional staff members.

It is also suggested in this report that the nation's surgeons do their murderous deeds in the privacy of the operating room with no one much interested. In fact, hospitals have for years conducted surgical reviews. More recently, Professional Standards Review Organizations, set up under provisions of federal law, have been monitoring medical decisions to try to apply peer pressures to doctors who are making too many mistakes. And don't forget the malpractice threat.

Now, it hardly needs to be argued that these are all imperfect forms of control, or that there are charlatans in medicine just as there are in business, journalism or even politics. But medicine itself is an imperfect science and no doctor is error-free.

The subcommittee proposes to solve all these problems by further expanding the regulatory powers of HEW. National Health would, of course, be the ultimate expansion, after which all American medicine could be modeled along the lines of VA and Public Health Service hospitals.

The subcommittee report was put together under the leadership of Chairman John Moss of California. He won't be around to press the case, having retired last year. But we don't think that will spare us from the future rigors of health politics.

—Courtesy THE WALL STREET JOURNAL, Jan. 9, 1979. Copyright © 1979.

ISMA Stand

The Indiana State Medical Association says that it is a "misconception" to consider a second opinion more valid than the first when faced with the possibility of needing medical or surgical therapy.

Official language for the pronouncement is contained in ISMA Resolution 78-11 (Second Opinions), adopted by the House of Delegates in October 1978.

The Association attributes the interest in second opinions to health insurance agencies—so-called third-party payors, including state and federal governments—who seek mandatory second opinions for all elective surgical procedures.

Although the Association supports the right of a patient or physician to seek a qualified second opinion, it opposes the requirement by third-party payors for mandatory consultations.

When any agency requires second or more opinions, the Association says that such an agency should be responsible for paying the consultant fee as well as the charges for related tests.

The Physician's Integrity Is at Stake

DONALD F. FOY
Executive Director
Indiana State Medical Association

An overwhelming percentage of physicians have always tried to keep medical costs low. It is good medical care to do only those procedures and studies necessary in properly caring for patients. Although excessive diagnostic studies and therapeutic procedures can be hazardous to patients, they frequently ask for useless studies and unnecessary surgery. Physicians, in turn, spend large amounts of their time discouraging such actions.

In most hospitals the "unnecessary" tonsillectomies were eliminated decades ago. This was accomplished by education and peer pressure from the dedicated physicians who were officers of the staff and chairmen of the committees.

Mr. Califano has launched a massive publicity campaign to encourage patients to get second opinions prior to elective surgery. Because medicine is not an absolute exact science (what science is?), there will be occasional differences of opinion as to whether or not surgery can be deferred. Do you require two episodes of inflammation of the gall bladder before you take it out, or three? Do you require two, three, or four episodes of abnormal bleeding from the uterus in a 50-year-old woman before you remove it?

Let's look at the opposite side o the problem. If there is a likelihoo that a second opinion will be asked for by the patient, the physician wil order additional laboratory, x-ray and other studies. The second opinion physician will repeat mos of the previous studies because he will have more confidence in the consultants he uses (x-ray and lab etc.). Not only will this increase the cost to the patient, but there is significant risk in many of these procedures.

Further, surgeons have the same degree of ethics as other physicians If the patient is encouraged to get a second opinion from a surgeon, he also will want second opinions on the work of every other physician If an expensive radiological procedure is done at one hospital shouldn't it be repeated elsewhere?

The conclusion is obvious. Overall costs will be markedly increased Eventually the work that was deferred will have to be done.

Second opinions for good medical reasons traditionally have been accepted and encouraged by physicians. But second opinions requested solely for cost containmen reflect an attack on the integrity o all physicians. This can only lead to unnecessary diagnostic procedures, which will harm the patien and drive up medical costs.

From the News Media

Responses to the Moss Report

(The AMERICAN MEDICAL NEWS recently quoted editorial comments from several major newspapers concerning the report on "unnecessary surgery" by the House oversight committee headed by outgoing Rep. John Moss (D., Calif.). Below are some excerpts.)

CHICAGO TRIBUNE: . . . Consumers have particular difficulty in protecting themselves from unnecessary surgery; they are usually ill, lack medical expertise, and feel they dare not question a physician's judgment . . .

What we need is more cooperation between battling government factions and physicians' organizations to work out more effective protections for patients without increasing expensive and cumbersome regulatory interference. Unless the medical professional can clean up the problem quickly, more government regulation will be inevitable—with all its undesirable consequences. And the specter of national health insurance—which will make the problem worse instead of better—will be right behind . . .

MIAMI HERALD: . . . The problem of excessive surgery was not caused by any single factor. It is a result of complex reasons that include financial incentives for doctors to operate, the hospitals' need to keep their beds full, and insurers' bias toward in-hospital treatment at the expense of outpatient care . . .

No doubt it is also influenced by a public attitude that demands quick and certain repair work when slow, unsure medical treatment actually is a sounder practice . . .

Government reaction should not be pinned to the simple, false hope of salvation through federal licensing. Rather, it should redirect government's own incentives toward rewarding the more responsible practice of medicine . . .

PHILADELPHIA BULLETIN: . . . Many medical insurance plans pay for a second consultation, and the (subcommittee) wants the federal government to require that such consultations are made before elective surgery is performed in instances where federal government financing of the medical care is involved . . .

What we don't like is the idea that the federal government should be involved in surgical procedures any more than is absolutely necessary. And we feel the best way to prevent this is for the medical profession and the health care community to demonstrate that it does not need such monitoring . . .

WASHINGTON POST: . . . While the Administration earnestly declaims about the urgent need for cost containment and quality assurance in medical care, the promising PSRO system, with a few localized exceptions, merely stumbles along, six years after enactment into law . . .

There are various other devices for getting at the complexities of the needless-surgery issue. Virtually all hospitals routinely review surgically removed tissue as a check on diagnostic quality. But medicine's old-boy mentality rarely permits disciplining of poor performers, and as for publicly identifying them—that's out of the question. Second opinions on surgery, a system that is yet to be disputed on any rational basis, continues to inflame the mandarins of medicine, though, fortunately, the concept is gradually seeping into the practice of medicine . . .

Given the unpleasantries of needed surgery, we can well do without the unneeded variety . . .

Medicine now possesses the analytical techniques and the organizational means to accelerate the process of rational assessment of surgical procedures. But doctors have got to do it, or guess who's going to jump in and do it for them?

Guest Editorial

Get Off Our Backs!

WALLACE A. SCEA, M.D.
Elwood

An open letter to all politicians and bureaucrats, elected and appointed, local and national:

Criticizing and attacking the medical profession seems to be the "in" thing to do now, from our glorious leader, Mr. Carter, on down the rank and file of you bureaucrats. We have been blamed for inflation, a problem which this administration and this Congress has been unable to solve, or are unwilling to solve. Each half-hearted and inept attempt to solve the problem seems to do nothing but feed the monster (inflation) and make it rear its ugly head a little higher.

Blaming the medical profession may be the first softening blow by the administration and Congress to weaken any opposition to National Health Insurance, and eventually a complete loss of all our freedoms. The solution to inflation remains very simple—cut government spending. Are you people qualified to criticize and attack us? Not really!

I propose you bureaucrats should be licensed to practice your trade. **We are!** I propose you have to complete eight years of higher education and pass a licensing examination. **We have to!** I propose that those of you who intend to specialize as judges, Congressmen and legislators should complete another four years of specialized training and pass a qualifying licensing exam—our specialists in the medical profession have to do this.

I propose that all governmental positions from precinct committeeman to the President have standards of performance, under constant surveillance and review for shortcomings and "below standard" work. We have this in the form of your sponsored PSRO. We would welcome the opportunity to review and police your activities.

I propose that all of you be required to complete 50 hours of post-graduate courses per year at your own personal expense, as we do. This 50 hours a year (if successfully passed) would help you retain your licenses as bureaucrats. You might call it CBE (Continuing Bureaucratic Education), which would be analogous to our CME (Continuing Medical Education).

I propose that all of you be held liable and be properly sued for your errors and incompetence—professionally and personally. **We are held liable!** We in the medical profession are being forced to practice "defensive medicine." If you men and women who make the laws and regulations had to fear reprisal such as law suits and personal financial loss for "negligence" and "errors" in judgment, our country and our people would be a lot better off. (Your esteem in the minds of people as registered by the public opinion polls might be elevated to the level of those in other professions.)

Until I see an increase in the amount of training you have, an improvement in your performance and a return to your intended roles of public servants—making you our equals—I will continue to resent your criticism and attacks.

Meanwhile—**Get off our backs!**

Reprinted with permission from THE CALL-LEADER, Elwood, Indiana.


The Great Laxative Escape
COLACE®
dioctyl sodium sulfosuccinate
Colace means escape—from laxative stimulation, from laxative harshness, from laxative habit. Colace gently helps soften stools for easy, painless, unstrained elimination. It's the great laxative escape, from infancy to old age. Available in 100 and 50 mg. capsules. Syrup or liquid.
Mead Johnson
PHARMACEUTICAL DIVISION
©1978 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. J578-1

This asthmatic isn't worried about his next breath...



he's active he's effectively maintained on

QUIBRON

Each capsule or tablespoonful (15 ml) liquid contains theophylline (anhydrous) 150 mg and glyceryl guaiacolate (guaifenesin) 90 mg

- theophylline for effective around-the-clock bronchodilator therapy
- 100% free theophylline

Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema.

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100; Liquid in bottles of 1 pint and 1 gallon.

See package insert for complete prescribing information.

Mead Johnson

PHARMACEUTICAL DIVISION

© 1979 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. MJL 6-42

THE JOURNAL, in cooperation with ne Division of Postgraduate and ontinuing Medical Education of the ndiana University School of Medi- ine, offers its readers a Continuing Aedical Education program. This is ne 16th in a series of CME articles, roduced by the faculty of the chool of Medicine and is supported y a grant from its Division of ostgraduate and Continuing Med- al Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 293.



Exercise-Induced Asthma

yperventilation, hypocapnia, acidosis—or simply ry, cool air—may contribute to exercise-induced sthma. It seems likely, however, that a single physio- gical factor cannot be singled out . . .

L. CRAIG MILLER, M.D.
Indianapolis

IN 1679, T. Willis wrote of a clear association between exercise and asthma. He observed, "Whatsoever therefore makes the blood boil or raise it to an effervescence as violent motion of the body or mind, excess of cold or heat . . . doth cause asthmatic assault to such that are predisposed."[17]

Today, after decades of research, little more can be added to Willis' observation about exercise-induced asthma other than it is not an uncommon event and should not be considered as a separate entity from asthma.

In the 1940s, the first reports measuring the objective changes in pulmonary functions in asthmatics with exercise were published.[8,4] Over the next decade numerous investigators reported conflicting findings of the effect of exercise on lung functions in asthmatics. Some investigators found improvement in pulmonary function after a brief period of exercise while others noted varying degrees of bronchoconstriction.

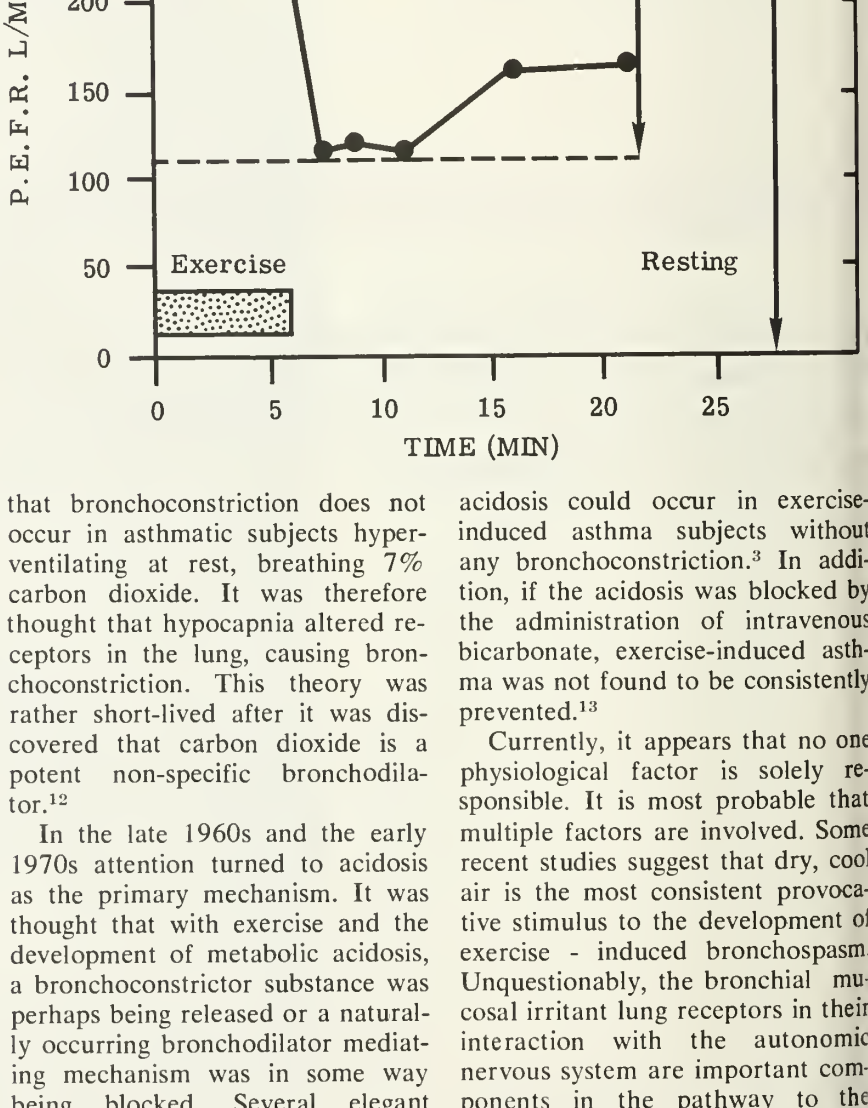
e author is an Assistant Professor of dicine, Pulmonary Division, Indiana iversity School of Medicine. He is a 71 graduate of that school.

This apparent lack of uniformity remained a point of confusion until the early 1960s when it was first clearly shown that the bronchodilation occurs commonly during the first few minutes of exercise.[6]

The typical response of an asthmatic patient to prolonged exercise has been shown to be two-phased (*Figure 1*). Initially, the expiratory flow rates improve. The magnitude of this bronchodilation varies greatly patient to patient. This initial phase of bronchodilation is short-lived and is followed by varying degrees of bronchoconstriction.

From this characteristic two-phased airway responsiveness, we are able to formulate a working definition for exercise-induced asthma. Simplistically, exercise-induced asthma is an acute reversible airway obstruction provoked by physical exertion.

FIGURE 1
Typical response to six minutes of running by an asthmatic child. Exercise was discontinued from Minute 6 and is indicated on the graph as "resting."



MECHANISMS OF EXERCISE-INDUCED ASTHMA

A number of mechanisms have been proposed to explain the occurrence of exercise-induced asthma. None of the proposed mechanisms to date satisfactorily explains exercise-induced asthma on its own. Hyperventilation has been suggested by a number of investigators as the initiating mechanism.[9,12] It was initially thought that the combination of hyperventilation and the subsequent fall in carbon dioxide tension stimulated lung receptors, which subsequently led to bronchoconstriction. Subsequently, a number of studies were performed by having asthmatic subjects who had exercise-induced asthma hyperventilate at rest and it was found that a significant portion of the subjects did not develop bronchoconstriction.[14,1]

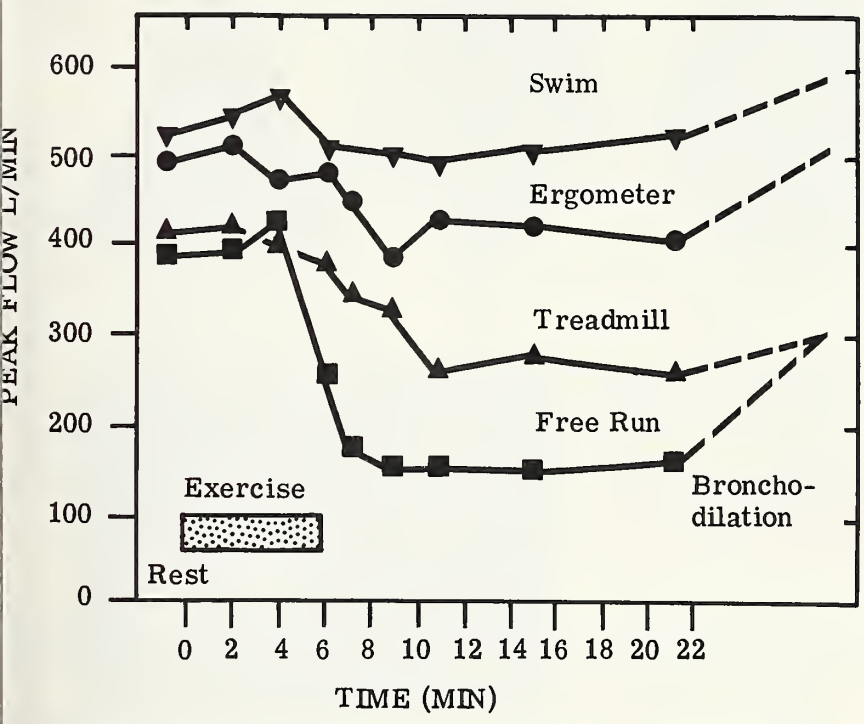
An alternate proposed mechanism was hypocapnia. It was noted that bronchoconstriction does not occur in asthmatic subjects hyperventilating at rest, breathing 7% carbon dioxide. It was therefore thought that hypocapnia altered receptors in the lung, causing bronchoconstriction. This theory was rather short-lived after it was discovered that carbon dioxide is a potent non-specific bronchodilator.[12]

In the late 1960s and the early 1970s attention turned to acidosis as the primary mechanism. It was thought that with exercise and the development of metabolic acidosis, a bronchoconstrictor substance was perhaps being released or a naturally occurring bronchodilator mediating mechanism was in some way being blocked. Several elegant studies subsequently were published, which reported that severe acidosis could occur in exercise-induced asthma subjects without any bronchoconstriction.[3] In addition, if the acidosis was blocked by the administration of intravenous bicarbonate, exercise-induced asthma was not found to be consistently prevented.[13]

Currently, it appears that no one physiological factor is solely responsible. It is most probable that multiple factors are involved. Some recent studies suggest that dry, cool air is the most consistent provocative stimulus to the development of exercise - induced bronchospasm. Unquestionably, the bronchial mucosal irritant lung receptors in their interaction with the autonomic nervous system are important components in the pathway to the bronchoconstriction seen in exercise-induced asthma.

FIGURE 2

Exercise-induced asthmas in one child with four different types of exercise, each performed at the same metabolic rate. The greater efficacy of swimming can be seen. The more demanding the exercise is, the greater the degree of bronchial spasm.



FACTORS KNOWN TO AFFECT THE SEVERITY OF E.I.A.

The duration of the exercise is an important factor. As previously mentioned, bronchodilation commonly occurs during the first 3-4 minutes of an exercise. Therefore, if exercise-induced asthma is to be detected, the exercise must be 6-7 minutes in duration. Further prolongation of exercise, greater than minutes, apparently does not cause further decline in pulmonary function.

The type of exercise is also important. In a given individual exercising at the same metabolic rate, different degrees of bronchoconstriction are observed with different types of exercises. If swimming, bicycling, treadmill running and free running are compared, a variation in the degree of bronchoconstriction (*Figure 2*) is consistently noted.[6] With swimming, less bronchoconstriction is nearly universally seen in comparison to other forms of exercise. The explanation for this variation is not clear; however, some authors have suggested that variations in breathing pattern and/or environmental conditions are responsible.

Finally, the severity of the exercise and the season of the year also appear to be important factors. With respect to severity of exercise, it is not surprising that the more demanding the exercise, the greater the degree of bronchoconstriction. In fact, the degree of bronchoconstriction appears to be linearly related to the level of work performed. However, in some patients the work level must be in excess of 60% of their maximal work capacity before the severity is sufficient to trigger the bronchoconstriction.

The final factor associated with the severity of bronchoconstriction is the season of the year. It has been observed that exercise-induced asthma occurs with greater severity during the fall, winter and spring seasons in comparison to the summer.[11] Environmental factors such as ambient air pollution, humidity, temperature and wind velocities have been postulated to explain this seasonal variation in exercise-induced asthma.

THE EXERCISE STUDY

The diagnosis of exercise-induced asthma is contingent upon the documentation of the development of obstructive ventilatory defects during or following exercise. Costly and sophisticated pulmonary function equipment is usually not necessary. The simple measurement of peak expiratory flow rate before and after appropriate exercise stress is sufficient in the majority of patients. It is important to choose the appropriate exercise stress. The ideal laboratory exercise stress appears to be treadmill running for a minimum of 6 minutes, associated with a heart rate increase to approximately 75% of the predicted maximal heart rate. Depending upon the age and general physical health of the individual, cardiac monitoring may be advisable.

A positive exercise-induced asthma stress test is confirmed by a greater than 15% fall in the peak expiratory flow rate or if spirometry is used, a decrease of 15% in the FEF_{25-75} (maximum mid-expiratory flow rate). In a majority of patients, the diagnosis is obvious on clinical grounds alone.

TREATMENT

In spite of the lack of understanding of the specific mechanisms

of exercise-induced asthma, much is known about the effects of drugs in altering the severity of bronchoconstriction. It has been known for some time that placebo preparations may reduce and in some cases block exercise-induced asthma.[5] This placebo effect has led to further psychological studies in an attempt to find non-pharmacologically active modes of therapy. Hypnosis has been used extensively and has been shown to decrease the severity of exercise-induced asthma in a number of subjects; however, the placebo responders become less suggestible with time.[7]

Sympathomimetic agonists and theophylline preparations clearly have beneficial effects on exercise-induced asthma.[2,16] Ephedrine, isoprenaline, adrenalin, salbutamol, terbutaline sulfate, and aminophylline significantly alter the degree of bronchospasm in exercise-induced asthma. In a large number of patients, no decline in pulmonary function can be found when these drug preparations are administered prior to exercise. In fact, only 5%-10% of patients have been found to have any degree of bronchospasm regardless of the type of medication used.

Cholinergic blocking agents, atropine or atropine-like drugs (SCH-1000) are known to be less effective in blocking exercise-induced asthma than the aforementioned medications.[15] In fact, only one in three patients will clearly benefit from the use of atropine or atropine-like drugs.

Sodium cromoglycate (Intal®) appears to be of value in the management of exercise-induced asthma in European studies.[14] Specifically, the inhalation of one capsule before exercise prevents exercise-induced asthma for approximately 4 hours in more than 50% of patients. Since this drug is not absorbed and has no cardiovascular effects, it appears to be an ideal drug for asthmatic athletes.

SUMMARY

Exercise-induced asthma can best be defined as an acute reversible airway obstruction caused by physical exertion. The underlying mechanism of the bronchoconstriction involves a complex interaction of the lung itself and the autonomic nervous system.

The type of exercise, along with its severity and duration, appears to dictate the magnitude of the bronchoconstriction that occurs. In addition, the season of the year, along with multiple environmental factors, appears to play a role in the severity of the bronchoconstriction. The development of bronchoconstriction, however, can be effectively altered by various pharmacological agents, which include sympathomimetic agonists, theophylline preparations and/or non-specific agents such as sodium cromoglycate. It appears that if the medication is given 30 minutes prior to exercise, exercise-induced asthma can be effectively blocked for a varying period of time.

The diagnosis of exercise-induced asthma can be established by the performance of a clinical exercise study. The exercise study is helpful in establishing both the diagnosis and the effectiveness of the pharmacological agent selected by the physician for treatment. In the majority of patients, sophisticated pulmonary function equipment is not needed to confirm the diagnosis. A simple peak flow meter or a water-sealed spirometer are sufficient for this purpose.

REFERENCES

1. Allen, TW, Addington, W, Rosendal, T, Cugell, DW: Alveolar carbon dioxide and airway resistance in patients with post-exercise bronchospasm. *Am. Rev. Resp. Dis.*, 107: 816, 1973.
2. Anderson, SD, Silverman, M, König, P, Godfrey, S: Exercise-induced asthma. *Brit. J. Dis. Chest*, 69:1, 1975.
3. Beaudry, PH, Wise, MB, Seeley, JE: Respiratory gas exchange at rest and during exercise in normal and asthmatic children. *Am. Rev. Resp. Dis.*, 95:248, 1967.
4. Engstrom, I, Karlberg, P, Kraepelien, S, Wengler, G: Respiratory studies in children VIII. *Acta paediat. scan.*, 49:850, 1960.
5. Godfrey, S, Silverman, M: Demonstration of placebo response in asthma by means of exercise testing. *J. Psychomo Res.* 17:293, 1973.
6. Godfrey, S, Silverman, M, Anderson, SD: Problems of interpreting exercise-induced asthma. *J. Allergy Clin. Immunol.*, 52:199, 1973.
7. Heimlich, EM, Strick, L, Busser, RJ: An exercise response test in childhood asthma. *J. Allergy*, 37:103, 1977.
8. Herxheimer, H: Hyperventilation asthma. *Lancet*, i:83, 1946.
9. Irnell, L and Swartling, S: Maximal expiratory flow rate at rest and during muscular work in patients with bronchial asthma. *Scan. J. Resp. Dis.*, 47:103, 1966.
10. McNeill, RS, Nairn, JR, Miller, JS, Ingram, CG: Exercise-induced asthma. *Q. Jl. Med.*, 35:55, 1966.
11. Pierson, WE, Bierman, CW: Free running test for exercise-induced bronchospasm. *Pediatrics*, 56:890, 1975 (Supplement)
12. Rebuck, AS, Read, J: Exercise-induced asthma. *Lancet*, ii: 429, 1968.
13. Seaton, A, Davies, G, Gaziano, D, Hughes, RO: Exercise-induced asthma. *Br. Med. J.*, iii:556, 1969.
14. Silverman, M, König, P, Godfrey, S: The use of serial exercise tests to assess the efficacy and duration of action of drugs for asthma. *Thorax*, 28:574, 1973.
15. Sly, RM, Heimlich, EM, Busser, RJ, Strick, L: Exercise-induced bronchospasm: Effect of adrenergic and cholinergic blockade. *J. Allergy*, 40: 93, 1967.
16. Vassallo, CL, Gee, JBL, Domm, BM: Exercise-induced asthma. *Am. Rev Resp. Dis.*, 105:42, 1972.
17. Willis, T: Pharmaceutica Rationales Part 2. London: Dring, Harper and Leigh. (1679).

For hemorrhoids and other anorectal conditions



External hemorrhoids



Internal hemorrhoids



Pruritus ani



Proctitis



Anal fissures



Easy to handle, easy to insert, comfortably shaped—Rx only

Easy to apply, nonstaining—Rx only

Prescribe Anusol-HC®

Suppositories/Cream

for symptomatic relief

- Effectively reduces inflammation and edema
- Rapidly relieves pain and itching

ANUSOL-HC® SUPPOSITORIES
Hemorrhoidal Suppositories
ANUSOL-HC® CREAM
Rectal Cream with Hydrocortisone Acetate

CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydracortisone acetate, 10.0 mg; bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian balsam, 18.0 mg; zinc oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani.

Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: Anusol-HC® Suppositories and Anusol-HC® Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24); in silver foil strips with Anusol-HC W/C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01); with plastic applicator, detachable label.

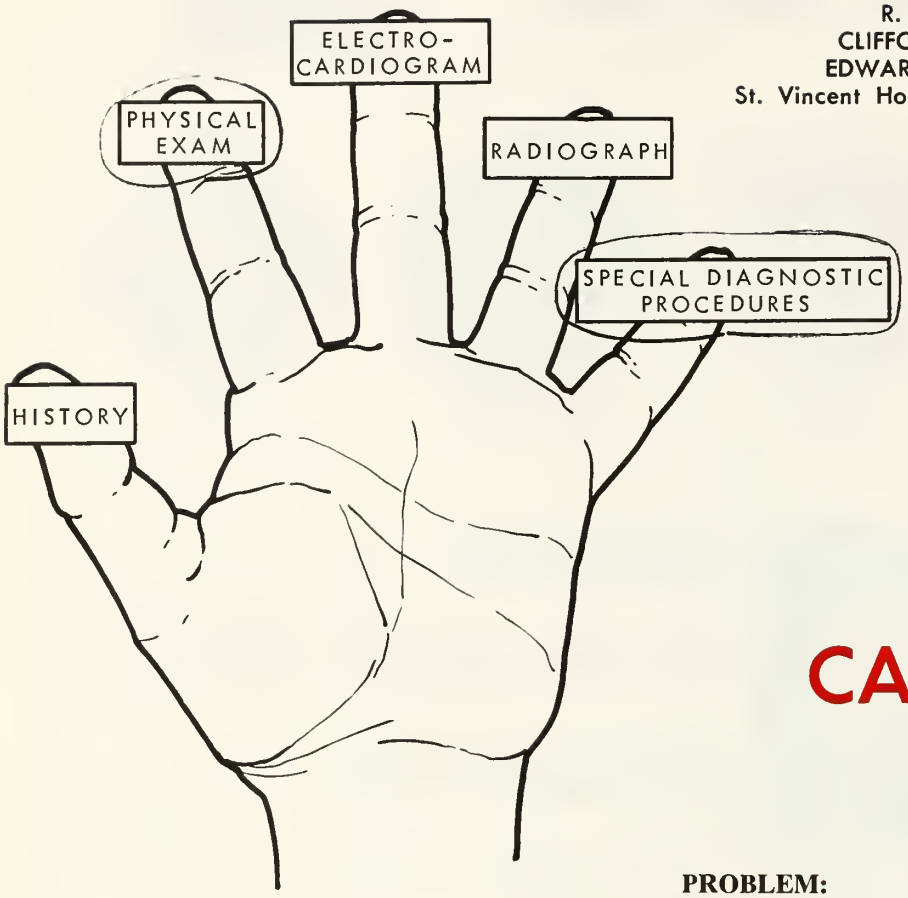
Store between 15°-30° C (59°-86° F.)

Full information is available on request.

Warner/Chilcott
Division, Warner-Lambert Company
Morris Plains, N.J. 07950

AN-GP-91

The professional source of anorectal comfort



R. JOE NOBLE, M.D.
CLIFFORD C. HALLAM, M.D.
EDWARD F. STEINMETZ, M.D.
St. Vincent Hospital and Health Care Center
Indianapolis

THE FIVE FINGERS OF CARDIOLOGY

The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac-diagnosis.

Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.

PROBLEM:

Two patients are referred for evaluation of heart murmurs. The first is a 15-year-old boy, in whom the question is asked: Can he participate in vigorous, competitive athletics? He is asymptomatic. A grade 4/6 systolic ejection murmur is evident at the base of the heart, peaking in early systole, and radiating into the carotids. The second heart sound displays physiological splitting. The left ventricle is not appreciably enlarged. The carotid pulse is normal.

The second patient is a 76-year-old lady in whom the question is asked: Should she undergo elective orthopedic surgery? She has experienced effort dyspnea in the past, but is currently asymptomatic. A grade 4/6 systolic ejection murmur is heard at the base, radiating into the carotids. The murmur is long-lasting and peaks in mid systole. A single second heart sound is audible. The left ventricle is enlarged. The carotid pulse is delayed in its upstroke and reduced in amplitude.

Examine the cross-sectional echocardiogram recorded on each patient.

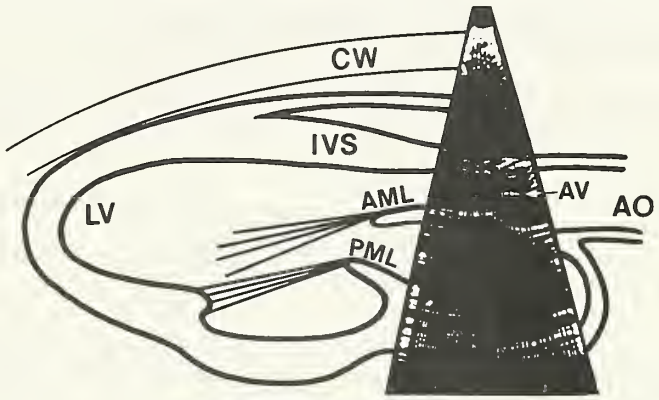
Based on these findings alone, should the boy participate in competitive athletics? Should the elderly lady undergo elective surgery?

ANSWER:

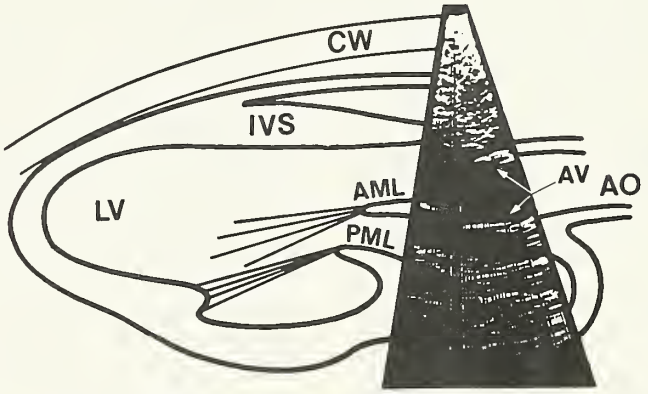
Cross-sectional *Echocardiogram* A recorded on the 15-year-old boy demonstrates that the aortic cusps are thin, and appropriately appose each other in diastole. *Echocardiogram B,* recorded during systole, shows the cusps to separate widely, even touching the aortic root. This finding definitely excludes significant aortic stenosis. The patent is asymptomatic; the normal carotid pulse and early peaking murmur also suggests the aortic stenosis is not hemodynamically significant. The boy's activity should not be limited.

In the elderly lady, the delayed carotid pulse and long, late peaking murmur indicate significant aortic stenosis. *Echocardiogram C* demonstrates that the maximal separation of the aortic cusps is less than 1 cm during ejection, confirming this finding. The anesthetic operative risk in such an individual would be extremely high. She should not undergo an elective operation because of this unacceptable risk.

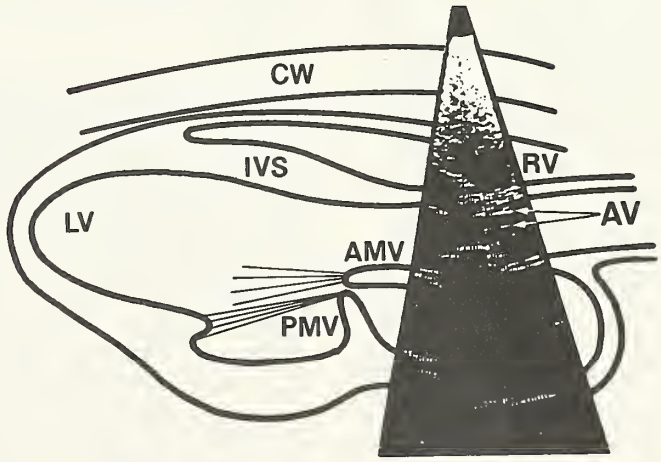
In summary, the physical examination is often sufficient to determine the severity of aortic stenosis. However, cross-sectional echocardiography provides a new, accurate means of actually visualizing the aortic cusps, to objectively confirm the clinical diagnosis.



ECHOCARDIOGRAM A
Cross-sectional echocardiogram; long-axis view of aortic valve is DIASTOLE in young boy.



ECHOCARDIOGRAM B
Same view as "A", recorded in systole.



ECHOCARDIOGRAM C
Long-axis cross-sectional echocardiogram of aortic valve in systole in elderly patient.

Anesthetic-Related Maternal Mortality in Indiana

VIRGINIA K. BOND, M.D.[1]
WILLIAM D. RAGAN, M.D.[2]
Indianapolis

ALL MATERNAL DEATHS reported in Indiana are studied by a board-certified obstetrician. This individual interviews the patient's physician, summarizes the medical records, and reviews pathological studies. The case is then presented in a confidential setting before a review committee.[1] The conclusions of this committee have been reviewed by the authors with respect to anesthetic related factors. The time period covered was 1967-1974, excluding 1969 because of changes in committee personnel and inadequate records. In this seven-year period there were 154 maternal deaths, which may be divided into the following groups:

1) Deaths related to a concomitant disease or accident: 44.

2) Deaths related to a complication of pregnancy: 86.

3) Deaths related to anesthesia: 14.

4) Deaths in groups 1 or 2 which might have been modified by prompt management by an anesthesiologist: 14.

DEATHS RELATED TO ASPIRATION

Aspiration of gastric contents is the leading cause of anesthetic related deaths in obstetrics.[2,3] Five such deaths during vaginal delivery and five that occurred during Cesarean section are summarized in *Table 1*.

Inhalation of particulate matter *(Table 1)*, such as food, leads to obstruction of the tracheo-bronchial tree. Gastric fluid, with pH below 2.5 when aspirated into the lung leads to progressive respiratory dysfunction. Originally described by Mendelsen, the instillation of 20 cc of 0.1 N hydrochloric acid in the trachea of rabbits produced congestion and edema through the lungs.

Prophylactic antacids given through labor are used to increase gastric fluid pH above 2.5 and thus reduce the risk of pneumonitis should aspiration occur.[4,5] Regional anesthesia for vaginal delivery reduces but does not entirely eliminate the hazard of pulmonary aspiration.

A cuffed endotracheal tube must always be placed when sufficient parenteral or inhalation anesthetic drugs to attenuate protective laryngeal reflexes are administered.[6] Tracheal intubation may be accomplished by utilizing a barbiturate-succinylcholine sequence with cricoid pressure.[7] Pretreatment with a nondepolarizing muscle relaxant will prevent intragastric pressure elevations from succinylcholine produced muscle fasciculations.[8] Awake intubation may occasionally be indicated. It should be noted that all patients detailed in *Table 1* received "anesthesia" by mask.

DEATHS UNRELATED TO PULMONARY ASPIRATION

Four anesthetic deaths were not related to aspiration *(Table 2)*. One case involved a systemic reaction to lidocaine. Three cases were associated with cardiopulmonary collapse during administration of cyclopropane.

Because of the widespread use of local anesthetic agents in obstetrics, physicians must be able to treat toxic reactions. Experience with intravenous lidocaine for treatment of dysrhythmias has contributed to the understanding of the sequence of events occurring with high blood levels of the drug. The first signs of toxicity are a metallic taste, numbness of the face, somnolence, anxiety or twitching. At this point, protection of the airway is of first importance. The patient should be asked to hyperventilate while breathing oxygen. Hypocapnia raises the threshold for convulsions.[9] If a convulsion occurs, prior oxygenation may be protective. Peak levels of lidocaine are usually reached rapidly and recede rapidly. If the convulsion is prolonged, a small dose of diazepam (2.5-3 mg) or short-acting barbiturate (thiopental 1-3 mg/kg) may be given intravenously. Since these convulsions are usually short lived and depression follows, care must be taken not to overtreat with depressant drugs.[10]

Prompt effective treatment of toxic reactions depends upon the

1. Assistant Professor of Anesthesia, Director of Obstetrical Anesthesia, Indiana University School of Medicine, Indianapolis.
2. Associate Professor OB-GYN, Indiana University School of Medicine, Indianapolis.

ailability of dependable oxygen pply, ambucaine bag and mask, dotracheal equipment and appro- iate drugs. A routine intravenous catheter provides the necessary route for drug administration should an unexpected emergency situation occur.

TABLE 1

DEATHS RELATED TO PULMONARY ASPIRATION OF GASTRIC CONTENTS

TYPE OF DELIVERY	ANESTHETIC AGENT	ANESTHETIC TECHNIQUE
Vaginal	"Whiffs of" Ether	Mask
Vaginal	Meperidine Nitrous Oxide	Mask
Cesarean Section	Cyclopropane	Mask
Vaginal Mid-Forceps	Methoxyflurane Nitrous Oxide	Mask
Cesarean Section	Ether	Mask
Cesarean Section	Thiopental Halothane Nitrous Oxide	Mask
Vaginal	"Light General Anesthesia"	Mask
Cesarean Section	Thiopental Cyclopropane	Mask
Cesarean Section	Cyclopropane	Mask
Vaginal	"Whiffs of" Anesthesia	Mask

TABLE 2

ANESTHETIC DEATHS UNRELATED TO PULMONARY ASPIRATION

DELIVERY CIRCUMSTANCES	ANESTHETIC AGENT	ANESTHETIC TECHNIQUE	COMPLICATION
Cesarean Section (preeclampsia treated with hydralazine and magnesium sulfate)	Cyclopropane	Mask	Cardiac Arrest (5 minutes after beginning anesthesia)
Vaginal Delivery (84 kg patient)	2% Lidocaine (940 mgm.)	Paracervical Pudendal	Convulsion Cardiac Arrest
Breech Delivery	Cyclopropane	Mask	Cardiac Arrest
Cesarean Section (hypertension treated with reserpine)	Cyclopropane	Mask	Cardiac Arrest

MATERNAL DEATHS WHICH MIGHT HAVE BEEN MODIFIED BY A TEAM APPROACH

Anesthesiologists are constantly striving to eliminate the deaths associated directly with anesthetic agents or techniques. In addition, the anesthesiologist can, by providing monitoring and supportive assistance, modify the outcome in problem situations such as third trimester bleeding, inversion of the uterus, congestive heart failure and anemia.

REFERENCES

1. Ragan, WD: Indiana material mortality committee: Past, present and future. *The Journal of the Indiana State Medical Association,* 68:769-771, September 1975.
2. Mendelson, CL: The aspiration of gastric contents into the lungs during obstetric anesthesia. *Obstet. & Gynec.,* 52:191-205, 1946.
3. Baggish, MS, Hooper, S: Aspiration as a cause of maternal death. *Obstet. & Gynec.,* 43:327-336, 1974.
4. Peskett, WGH: Antacids before obstetric anesthesia. *Anesthesia,* 28:509-513, 1973.
5. Roberts, RB, Shirley, MA: Reducing the risk of acid aspiration during Cesarean section. *A & A,* 53:859-868, 1974.
6. Shnider, SM: Anesthesia for elective Cesarean section. Snider, SA. Obstetrical anesthesia, current concepts and practice. Baltimore and Williams and Wilkins, 94-106, 1970.
7. Sellick, BA: Cricoid pressure to control regurgitation of stomach contents during induction of anesthesia. *Lancet,* 2:404, 1961.
8. Miller, RD, Way, WL: Inhibition of succinylcholine induced increased gastric pressure by nondepolarizing muscle relaxants. *Anesthesia,* 34:185, 1971.
9. deJong, R: Effect of carbon dioxide on cortical seizure threshold to lidocaine. *Exper. Neurol.,* 17:221-232, 1967.
10. deJong, R: Local anesthetics Ed 2 Springfield, Ill., Charles C. Thomas, 112-113, 1977.

Postinjection Corticosteroid Atrophy

MAC C. ROLLER, M.D.
Franklin

Since the discovery of injectable steroids, some of the excitement has waned because side effects seem to outnumber the indications . . .

THE PASSAGE of time is often the only means by which we can evaluate certain therapeutic endeavors. Clinical applications in the practice of medicine often reflect this process most clearly. Physicians in clinical practice for any length of time have watched new drugs and treatment modalities originate with excitement, fall into disfavor, and then ultimately take a more understood and logical place in the medical armamentarium.

Such is not unexpected with injectable steroids. The enthusiasm and optimism of discovery was tempered by increasing findings of side effects, which now nearly outnumber the indications. The reporting of side effects, unwanted responses, and therapeutic misadventures continues to be a most necessary part of the advancement of medical knowledge. With this in mind the following medical problem is reported.

CASE REPORT

A 31-year-old white female, a licensed practical nurse, requested an evaluation because of weakness of elevation of the right upper extremity and a sinking of the skin of the right upper arm. She was aware of the weakness first but indicated that the skin depression could have been present and not noticed until the

The author, a 1960 graduate of the Indiana University School of Medicine, operates an office-based family practice in Franklin, Ind. He is a member of the American Academy of Family Physicians.

ecreased use of the arm called her tention to this area. There was no ist history of significant medical oblems, specifically none related neuromuscular, vascular or der-atological difficulties.

Examination revealed weakness the deltoid muscle only and no eurosensory changes. A non-ten-er depressed area was noted over e upper portion of the deltoid ith subcutaneous atrophy and ght palpable thinning of the skin ith no vesiculation, erythema or gmentary change.

The more immediate medical re-ew was significant in that her at-nding physician had administered, ie month previously, a single in-ction of triamcinolone diacetate 40 mg.) for a "subdeltoid bursi-s." The patient was reassured that, all likelihood, these findings were lated to subcutaneous atrophy condary to the steroid and would e expected to resolve almost com-etely with time.

ISCUSSION

This problem is being reported ore often as a side effect of ste-oids, yet is still not widely rec-gnized outside of the dermatologi-al specialty. Injections of steroids re given in many ways depending n the clinical entity to be treated. ntradermal, subcutaneous, intra-uscular, intrabursal and intraartic-lar routes are used. The medica-on, if a suspension, may reason-bly be expected to remain in the me local area for some time.[1,2] Whether this finding explains part f the etiology may be a moot point rom a practical clinical standpoint, ut it may be significant from an nvestigational viewpoint. Most of ie reported atrophic changes have een associated with intradermal or ubcutaneous injection.

Schetman, Hambric and Wilson[3] ave done a thorough study of the athogenesis of dermal atrophy af-ter intradermal injection in normal skin. All of their subjects were men. They were uncertain whether part of the changes observed were due to mechanical effects, direct toxic effects or alterations due to vaso-constriction.

A majority of other cases reported, where the etiology was not immediately recognized, were in premenopausal women as it was in this instance.

Fisherman *et al*[4] noted the atrophic effects of intramuscular and deep subcutaneous injection of triamcinolone diacetate while evaluating this drug for allergic conditions. Fritsch[5] reported additional cases of a very similar nature and indicated also that premenopausal women seemed more susceptible to the atrophic effects of steroid injections. Cassidy and Bole,[6] however, felt that neither sex nor age preclude the development of atrophy.

Krueger[7] indicated that, despite earlier reports, the panatrophy of steroid injections remained a generally unrecognized problem. He reported additional cases and mentioned other forms of panatrophy. Ayres[8] and also Kikuchi with Horikawa[9] noted that lymphatic vessels have apparently carried steroid from the site of injection with resulting distant atrophic effects.

Other published reports lend confirmation and more definitely establish the etiology of the atrophic changes after steroid injection. Most, but not all cases evaluated, were found to have triamcinolone as the apparent etiologic agent.

SUMMARY

In the patient mentioned here, as well as in the majority of clinical cases reviewed, subdermal and intradermal injections of corticosteroids were noted to produce dermal and subdermal atrophic changes at or near the injection site. These changes were generally, but not always, in premenopausal women, occurred about one month after injection and had basically spontaneous resolution within an average of three months.

In this case localized muscular weakness, not previously reported, was a presenting complaint. Conceivably, this weakness was due to irritation of the axillary (circumflex) nerve and not a direct effect of the steroid. The atrophic change was clinically consistent with similar effects of steroid medication reported by other investigators. Physicians using injectible steroids should be aware of this type of atrophic possibility.

REFERENCES

1. Iuel, J, Kryger, J: Local cutaneous atrophy following corticosteroid injection. *Acta Rheum Scand*, 11:137-144, 1965.
2. Goldman, L: Histological effects of hydrocortisone in the skin of man. *Ann N.Y. Acad. Sci.*, 61:520, May 27, 1955.
3. Schetman, D, Hambrick, GW, Jr. Wilson C: Cutaneous changes following local injection of triamcinolone. *Archives of Dermatology*, 88:820-828, December 1963.
4. Fisherman, EW, Feinberg, AR, Feinberg, SM: Local subcutaneous atrophy *J.A.M.A.*, 179:12, 971-972, March 24, 1962.
5. Fritsch, WC: Deep atrophy of the skin of the deltoid area. *Arch. Derm.*, 101: 585-587, May 1970.
6. Cassidy, JT, Bole, GG: Cutaneous atrophy secondary to intra-articular corticosteroid administration. *Annals of Internal Medicine*, 65:5, 1008-1018, November 1966.
7. Krueger, G; Familial localized panatrophy: An iatrogenic phenocopy secondary to injection of a corticosteroid. *The Journal of Pediatrics*, 89:4, 682-683, October 1976.
8. Ayres, S Jr: Alopecia areata with associated subcutaneous atrophy. *Archives of Dermatology*, 90:242, August 1964.
9. Kikuchi, I, Horikawa, S: Perilymphatic atrophy of the skin. *Arch. Derm.*, 109:558-559, April 1974.

BREAST CANCER: Social and Psychological Factors In Its Diagnosis and Treatment

JUANITA TODD, A.C.S.W.
Indianapolis

MORTON BARD, a psychologist associated with the Section of Research Psychiatry at Sloan-Kettering Institute for Cancer Research, has stated, "Many of the lives saved by advances in medical science and technology are doomed to psychological invalidism which would be minimized by sound psychological preparation during illness and hospitalization."[2]

Experience over several years has reinforced the significance of the close relationship between the psyche and the soma, how closely they are intertwined, and how one influences the other. To treat a disease such as breast cancer and not to give recognition to its effect on the patient's psyche is to treat only half the problem. Without giving sufficient awareness to this, a woman may be left with psychological problems that adversely affect her functioning as a woman, wife, mother, employee or whatever her role—and yet may be "cured" of her disease.

Our society places great emphasis on a woman's breasts. Breast development is a significant factor in a woman's psychological and physical maturation. At a fairly early age a girl becomes aware that breasts contribute to her attractiveness. As young girls become comfortable with themselves and their inner feelings, most recognize that breast development enhances their femininity and this affects heterosexual functioning. They become aware of the added significance and pleasure in the sexual relationship and later in breast feeding their babies.

Loss of this psychologically significant organ may have different meanings for different women. It is this that is important to clarify in helping a patient to accept and to adjust to a mastectomy. Doctors Bard and Sutherland point out in their reseach on women's adaptation to mastectomy that "knowledge of the patient's responses to other stress situations in the past is not helpful. Each stress experience has a very specific meaning; thus each patient will respond to a given stress in accordance with the specific meaning it has for her."[3] Reactions are, therefore, varied, individual, often unpredictable, and may vary in different stages of the illness and treatment.

Fear of surgery with its need for anesthesia may be a factor in a patient's anxiety. In breast cancer this fear is compounded by surgery that will change body image and may threaten a woman's sexual relationship with her husband or boyfriend. A few behavior theorists have suggested that a mastectomy is like castration for some. This may sound somewhat extreme, but this feeling does exist within some women, on either a conscious or unconscious level.

Loss or partial loss of an organ that a woman considers essential to her attractiveness can be especially traumatic for the woman whose self esteem and self worth are based on her physical attractiveness alone. Narcissism has inhibited her from reaching a level of emotional maturity that allows her to incorporate her physical being into her psyche in a healthy, objective fashion. Unsureness of one's femininity resulting from unresolved feelings or growing up experiences may be heightened by loss of a breast. A woman of any age and background, single or married, may fear loss of attractiveness. The depth of these fears is generally related to the degree of resolution of basic conflict about femininity and to her general adaptation to life.

The author is the chief social worker in OB-GYN and Radiation Therapy, Department of Social Service, Indiana University Hospitals, 1100 W. Michigan St., Indianapolis 46202.

This article is a condensation of a paper presented at a continuing medical education seminar on breast cancer at the I.U. School of Medicine in May 1977.

For some, fear of death may be e primary factor in their anxiety. o many, cancer connotes death. o be suddenly faced with the ossibility of one's own death may overwhelming and may leave a oman temporarily immobilized. earning to live with this possibility kes time and a resolution of fears.

Thus, the diagnosis of breast can- r and the recommendation for rgery can deal a tremendous blow a woman's psyche. The way the ysician or surgeon deals with this of utmost importance. How well handles this depends on the ef- rt he makes to understand the tient and her fears. Sometimes ars have to be sorted out before e patient can begin to think about atment plans and alternatives.

As several psychologists at CLA have suggested, counseling ould become a routine part of the astectomy procedure. They sug- st counseling for the wife prior to rgery so she can prepare for loss a breast and for the husband en indicated. However, experi- ce indicates that counseling hus- nd and wife together enables em to share the experience and cision making. Husbands need to ve the opportunity to verbalize estions, concerns, and doubts. ars and guilt need to be ver- lized to facilitate a supportive re- ionship.

The illness with its accompanying rgery may be a threat to a mar- ge. Where there is a stable rela- nship with good communication d good sexual adjustment, this is t likely to occur. It often brings uples closer together. In a mar- ge where there is already tension d conflict and sexual incompati- ity, the illness may increase ex- ing problems and may be the ecipitating factor in ending a re- ionship.

Even in the most satisfactory of relationships, the period following surgery can be a tenuous, trying time for a couple. For the woman the realization that she has lost a breast often exacerbates self doubts and concerns about how it will affect her husband. Some women report a delay in looking at the scar and are reluctant to have their husbands see it. The husband may be over-anxious about doing and saying the right thing. Some couples may need help in reestablishing physical intimacy and reassurance from their physician about resuming sexual activity.

Young women worry, too, about being able to see their children grow to adulthood. They worry about the effect of their illness on them. Children in the same family vary in their ability to cope. Families often need encouragement to keep communication lines open with the children during this period of crisis. Sharing and not withholding information can draw a family closer together and bring about a greater depth of caring.

Faced with the impact of breast cancer with all of its implications, a woman needs to perceive her physician as a concerned, understanding person. If she does, the trauma of losing a psychologically valued organ can be lessened. A woman may find this experience less traumatizing, too, if she can participate in the decision regarding treatment. More and more, women will expect to be an active participant in this decision. As women have had their consciousness raised through the women's movement, as they have become more knowledgeable about their bodies and their rights, they have become more discerning about their medical care. Increased knowledge of breast cancer has resulted in greater awareness of different treatment methods and procedures.

As Dr. Crile so aptly states in his book, *What Every Woman Should Know About the Breast Cancer Controversy,*[4] "For too long surgeons have assumed the entire burden of deciding how their patients with breast cancer should be treated. In the days when it was agreed that radical mastectomy was best, there was no alternative. Today there is no agreement and the surgeon, therefore, has an obligation to inform the patient of the facts. Only when the patient is allowed to participate in the decision can she accept an operation on her breast with what can be known ethically as 'informed consent'."

Dr. Crile does not mention separating the diagnostic biopsy from the mastectomy. He does, however, suggest that a woman "not submit to an operation for biopsy unless you consider the surgeon who does it qualified to treat you if he finds cancer."

Following her own mastectomy, Rose Kushner, a medical journalist, wrote a book entitled, *Breast Cancer: A Personal History and an Investigative Report.*[6] From her own experience, she writes about the controversial issue of separating the diagnostic biopsy from the mastectomy so that a woman may participate in the kind of mastectomy to be performed. As she states, "The point of this book is to show that we women should be free, knowledgeable, and completely conscious when the time comes for a decision, so that we can make it ourselves. Our lives are at stake, not a surgeon's." She recognizes that not all women may want or need this.

For the reasons stated earlier, however, unless a woman is very dependent and has a great need to be cared for, more will want and will expect to participate in the decision regarding treatment. Too, women are becoming more aware of their role as consumers of health

care and their right to challenge the system if necessary. This can be somewhat unsettling for those of us in the health care field, but it is a healthy sign for both the consumer and those in the health delivery system. Participating in a decision regarding treatment—especially a mastectomy with all of its implications—is a first step in helping a woman to accept treatment. It is evidence of some measure of control over her body and what happens to her.

Loss of control is frightening for most people and maintenance of control is especially important to the cancer patient whose disease hangs like an umbrella over his or her head at all times—even when "cured" or in remission. Sometime ago a psychiatrist, Dr. Samuel Klagsbrun, addressing the New York City Division of the American Cancer Society, said, "Many cancer patients need to maintain control over their destiny—they want to be in charge of themselves as long as possible."[5] For most people it is important for their emotional well being.

Recognition of the social and psychological aspect in diagnosis and treatment of breast cancer makes counseling of paramount importance. For the physician it means allowing more time for talking with patients to begin identifying needs and problems. Other disciplines—psychiatry, social work, nursing, the chaplaincy—can assist. As Dr. John Knowles, president of the Rockefeller Foundation has said, "I have always believed deeply that medicine is a social as well as a biological science."[1]

BIBLIOGRAPHY

1. Abrams, R: *Alone With Cancer.* Charles C. Thomas, Springfield, Ill., 1974.
2. Bard, M: The psychological impact of cancer surgery. *Proceedings of the American Cancer Society's National Conference on Human Values and Cancer,* 1972, pp 24-26.
3. Bard, M, Sutherland, A: Adaptation to radical mastectomy. ACS Professional Education Publication, *The Psychological Impact of Cancer,* pp 55-71.
4. Crile, G Jr: *What Women Should Know About Breast Cancer Controversy.* MacMillan, New York, 1973.
5. Klagsbrun, SC: Communications in the treatment of cancer. *American Journal of Nursing,* 71: 5, 944-948, May 1971.
6. Kushner, R: *Breast Cancer: A Personal History and an Investigative Report.* Harcourt Brace Jovanovich, Inc., New York, 1975.



"Efficiency is the key to your practice"

Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE

6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Immediate delivery on many 1979 models

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594

Clinical Notes

JERE D. GUIN, M.D.
Kokomo

Gamma Benzene Hexachloride Therapy for Scabies

THE MOST EFFECTIVE TREATMENTS are often haunted by the specter of adverse reactions. A case in point is a collection of anecdotal reports on central nervous system toxicity from gamma benzene hexachloride (Kwell). The problem is that similar symptoms can be produced in laboratory animals, lending credence to the reports. This prompted the Food and Drug Administration to issue a warning.[1] This particular chemical is well absorbed through intact skin in some areas. It tends to be stored in fat and to concentrate in the central nervous system. Females excrete the drug more slowly than males and suckling laboratory animals are at much greater risk than juvenile and adult animals.

Solomon, *et al*[2] reviewed the subject and recommended the soapy bath be omitted and application be for less than 24 hours. They also suggested that the 1% concentration should be used with extreme caution, if at all, in pregnant women, small infants or those with severe and widespread excoriation. The use of the shampoo for pediculosis (for a very brief period) was felt to be relatively safe. Retreatment, according to these authors, should not take place before eight days and then only if active organisms were demonstrated.

I have personally found that crotamiton cream (Eurax®), a 12 to 25% emulsion of benzyl benzoate and 6% sulphur ointment are useful when one can't use gamma benzene hexachloride. Although slow and messy, the sulphur ointment may be the safest of the group for treating the hands of infants since they put their fingers in their mouths.

REFERENCES

1. FDA Drug Bulletin. June, July, 1976, page 16.
2. Solomon LM, Fahrner L and West DP: Gamma benzene hexachloride toxicity review. *Arch Dermatol,* 113:353-357, 1977.

Oral Zinc Therapy for Acne

EACH ERA OF MEDICAL therapeutics, like generations of adolescents, seems to have its characteristic craze. A substantial proportion of the current spotlight is occupied by trace metals. Patients often mention or even bring in items from the lay press on zinc therapy for acne. Unfortunately, scientific articles on the subject are conflicting. At least three different Scandinavian groups claim it is effective, while two reports from the United States deny this. One group showed oral zinc to be equivalent to oxytetracycline in low dosage, but generic forms of that drug can vary enormously in bioavailability. Two studies found oral zinc no better than a placebo.

Recently, a double-blind study at the University of Iowa compared 220 mg. of oral zinc sulfate three times daily after meals with a placebo given in the same manner. Comedones, papules and cysts were similar in the two groups. However, pustules were reduced 37% after eight weeks of zinc therapy while they were unchanged in the placebo group. Goransson, *et al* also found a slight but statistically significant improvement in a similar study.

At present, there is little evidence that zinc has a dramatic effect on acne vulgaris. It may be of slight benefit particularly for pustular lesions. If so, it is no better than low-dose tetracyclines. Patients of mine who have taken zinc on their own have voiced little enthusiasm for its efficacy. Perhaps, however, they're only reflecting the opinion of their therapist.

REFERENCES

1. Weimar VM, Puhl SC, Smith WH, and tenBroeke JE: Zinc sulfate in acne vulgaris. *Arch Dermatol,* 114: 1776-1778, 1978.
2. Michaelsson G, Juhlin L and Ljunghal K: A double-blind study of the effect of zinc and oxytetracycline in acne vulgaris. *Br J Dermatol,* 97:561-566, 1977.
3. Orris L, Shalita AR, Sibulkin D, London SJ, and Gans EH: Oral zinc therapy of acne. Absorption and clinical effect. *Arch Dermatol,* 114:1018-1020, 1978.
4. Göransson K, Liden S, and Odsell L. Oral zinc in acne vulgaris: A clinical and methodological study. *Acta Derm Venerol (Stockh),* 58:443-448, 1978.

DIASTEMATOMYELIA: Rare and Unusual Features

RICHARD L. GILMOR, M.D.[1]
SOLOMON BATNITZKY, M.D.[2]
Indianapolis

DIASTEMATOMYELIA is an uncommon congenital anomaly of the spine in which there is a longitudinal separation of the spinal cord or conus medullaris by a fibrous or an osseous septum. Multiple varying vertebral anomalies including spina bifida, irregular laminar fusion, increased interpediculate distance, hemivertebrae, and complete or incomplete vertebral body fusions are usually associated features.

1. Departments of Radiology and Neurosurgery, Indiana University School of Medicine, Indianapolis.
2. Department of Radiology, Indiana University School of Medicine, Indianapolis. Current address: Department of Diagnostic Radiology, The University of Kansas Medical Center, Kansas City, Kansas 66103.

Request for reprints: R.L. Gilmor, M.D., Department of Radiology, Indiana University School of Medicine, 1100 West Michigan, Indianapolis 46202.

This paper was presented in part at the XI Symposium Neuroradiologicum, Wiesbaden, W. Germany, June 1978.

From 1970 to 1978 at the Indiana University Medical Center, 10 patients with diastematomyelia were evaluated and treated. All had surgical exploration and removal of the septum of the spinal canal. The *Table* summarizes the patients as age, sex, level of the septum, cu neous abnormalities, and the mo of presentation. The basis of t paper is to present four unusu variations that were encountered.

CASE	AGE	SEX	LEVEL	CUTANEOUS ABN	MODE OF PRESENTATION
1	NB	F	Lumbosacral	Myelomeningocele	Bony mass area o M-M
2	4Y	F	T6-7 & T12	Hairy patch	Pain left leg
3	11M	F	L2	Hairy patch	Klipple-Feil, Sprin gles deformity
4	4Y	F	L3-4	Hairy patch Caudal sacral sinus Sacra fossa meningocele	Scoliosis
5	4Y	F	T11	Dimple sacral area	Bony hump of back at birth Gait problem
6	NB	F	Sacral	Sacral Mass (Enteric cyst and lipoma)	Deformity right foot
7	32Y	F	T7	—	Weakness lower extremities
8	5Y	F	T1-2	Hairy patch	Clubfoot deformity Hypalgesia lower extremities Bladder problems
9	NB	M	Lumbar	Myelomeningocele	M-M
10	NB	M	L5-S1	Hairy patch Dimple sacral area Sinus tract	Sinus tract low back
	10Y		L5	—	Spasticity lower extremities

ABSTRACT

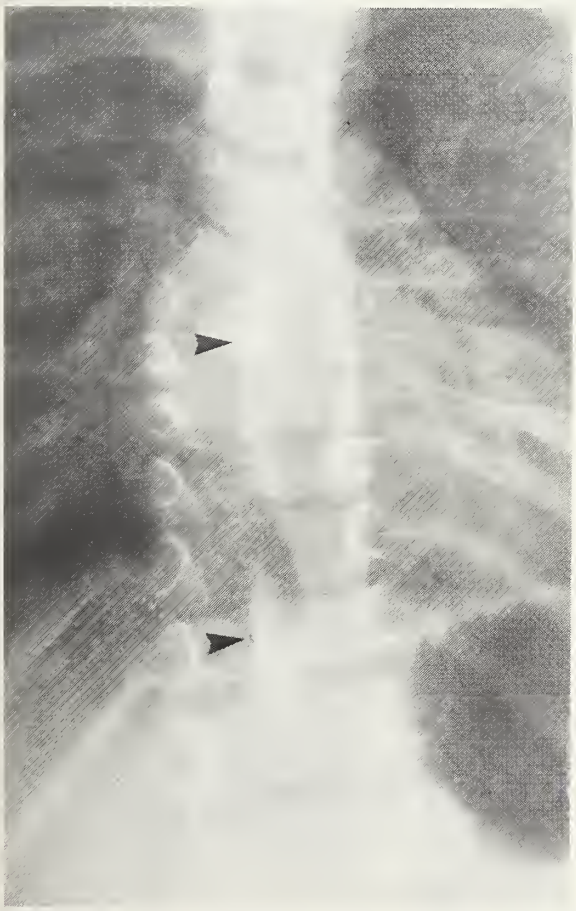
Four cases of rare variations of diastematomyelia are presented, namely: (1) "double" in which there are septa at two different levels in the same patient, (2) adult presentation, (3) a diastematomyelia in which one half of the cord terminated in a neural plate and the other half continued to provide innervation of the corresponding lower extremity, and (4) a recurrent diastematomyelia. The bony abnormalities and the radiographic assessment are discussed.

ATERIAL

Case 2 presented with pain in the ft leg, hypertrichosis of the lumsacral area and a normal neurogical examination. Spinal films cluding tomography demonstrated an osseus septum at the T6-7 and T-12 levels *(Figure 1a)*. Myelography confirmed the presence of the two septa *(Figure 1b)*. At surgical exploration, there was a laminar fusion of T6-7 and T11-12 as well as spina bifida of T8-9-10. The spinal cord was divided by the bony spicules from T7 to the T12 level. The septa along with the dural sleeves were removed without complication.

Case 7 was the only adult in our series. Because of a progressive spastic paraparesis and a flaccid bladder further evaluation including myelography was done *(Figure 2)*. A septum of the canal at the T7 level was found. Plain films had not demonstrated the bony spicule. At operation, there was fusion of the T7-8 lamina and an osseous spicule at T7. Post-operatively, her neurological deficit has been stable.

FIGURE 1a



Plain film, thoracic spine showing osseous septa at T6 and T12 level (arrows) as well as spina bifida T8-9-10.

FIGURE 1b

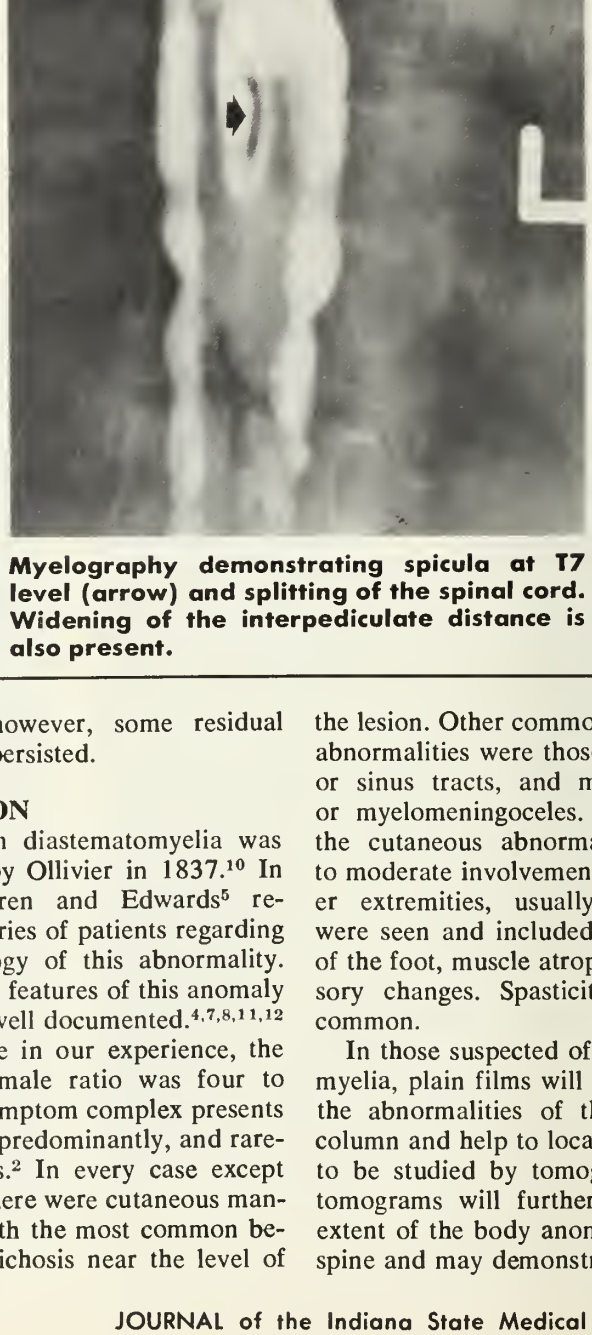


Myelogram—defects seen in the Pantopaque column secondary to osseous septa.

Case 9 had an unusual deformity of the neural elements without a septum. At birth there was a lumbar myelomeningocele with good motor function of the left leg except for plantar flexion. The right leg had good hip flexors with poor distal function. No radiographs were obtained prior to surgical intervention. At operation, the proximal spinal cord was found to be divided without a septum being identified. The right half of cord terminated in the neural plate of the myelomeningocele; whereas, the left maintained a "normal" course and entered into the sacral canal. A five-year follow-up has shown no significant change of the neural deficit of the lower extremities.

Case 10 presented in the newborn period with lumbar hypertrichosis, a midline lumbar sinus tract, and a sacral dimple. The neurological examination was normal. Spinal radiographs showed a widened interpediculate distance. Myelography revealed a defect in the canal at the L4 level *(Figure 3a)*. At operation a cutaneous sinus tract, not involving the dura mater and a bony spicule that was splitting the conus medullaris was removed. The dural sleeve about the spicule was also removed with repair of the anterior and posterior dural defects. Following operation, the neurological examination continued to be normal. He subsequently developed bilateral tibial torsion and an equinovarus deformity of the right foot that was treated by corrective surgery. Nearly 10 years after the original operation, he developed increasing lumbar lordosis and a spastic, steppage gait. Because of the gait abnormality, a repeat myelogram was done *(Figure 3b)*. A filling defect was found at the L4 level. At re-exploration, a fibrous band of tissue was found in the area of the previous bony spicule. This was removed followed by slow improvement of the motor function; however, some residual deficit has persisted.

FIGURE 2



Myelography demonstrating spicula at T7 level (arrow) and splitting of the spinal cord. Widening of the interpediculate distance is also present.

DISCUSSION

The term diastematomyelia was first used by Ollivier in 1837.[10] In 1940, Herren and Edwards[5] reviewed a series of patients regarding the pathology of this abnormality. The clinical features of this anomaly have been well documented.[4,7,8,11,12] As was true in our experience, the female to male ratio was four to one. The symptom complex presents in children predominantly, and rarely in adults.[2] In every case except the adult, there were cutaneous manifestions with the most common being hypertrichosis near the level of the lesion. Other common cutaneou abnormalities were those of dimpl or sinus tracts, and meningocel or myelomeningoceles. Other tha the cutaneous abnormalities, mi to moderate involvement of the lo er extremities, usually unilatera were seen and included deformiti of the foot, muscle atrophy and se sory changes. Spasticity was le common.

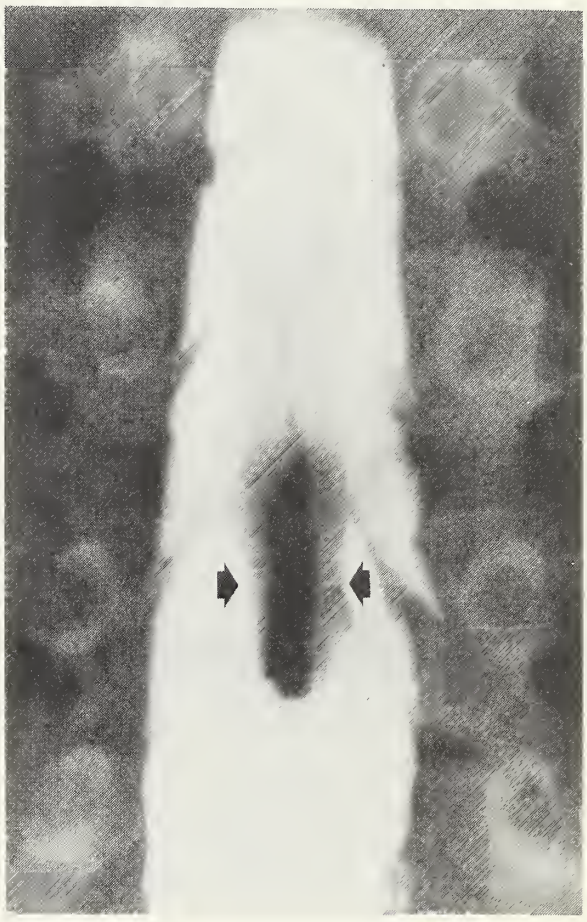
In those suspected of diastemat myelia, plain films will demonstra the abnormalities of the vertebr column and help to localize the ar to be studied by tomography. T tomograms will further define t extent of the body anomalies of t spine and may demonstrate an oss

FIGURE 3a



Myelogram. Study at one month of age showing large filling defect at L4 level and a widened interpediculate distance.

FIGURE 3b



Repeat myelogram 10 years later showing a tethered spinal cord as well as a filling defect at the L4 level (arrows).

us spicule. Myelography, however, as the advantage of demonstrating defect whether it be osseous or brous in nature and can also help the assessment of the spinal cord. omputed tomography, particularly hen done with water soluble conast media, may well replace the urrent means of investigation.

The treatment of diastematomyea is that of surgical removal of the eptum and excision of the dural eeve about the septum and repair f the dural defect.[1,4,7,8] The aim of urgical treatment according to Matn[8] is to prevent tethering of the ord by the septum. In general, this perhaps true in young children in hom the spinal cord does migrate cranially with further development. This theory, however, does not account for the rare adult who has no symptoms as a child, but rather develops problems in adult life and is found to have a diastematomyelia.

In reviewing the literature, those having a septum at two different levels are rarely mentioned. The largest review of cases by Keim[7] who, of 132 patients, recorded a total of five having a "double" diastematomyelia. Only three additional reports of a double diastematomyelia could be found.[1,4,6] In those reviewed by Keim[7] the levels were not given; however, in those documenting the levels of the two different septa, the thoracic area contained the lesion in three, the lumbar area in one, and the thoracic and lumbar area in one. It appears that a double diastematomyelia is a rare variation of an already rare congenital lesion.

The case of the diastematomyelia without a septum being identified would appear to be even more unusual in that the review by Keim[7] could document only two cases of the 132 having neither a fibrous nor an osseous septum. It is of interest that one portion of the divided cord ended in the neural plate of the myelomeningocele whereas the other portion continued into the sacral area with good neurological function. The etiology of

such an abnormality is not clearly understood; however, the most recent hypothesis of Gardner to explain all types of dysraphism is distention and varying degrees of rupture of the embryonal central canal.

SUMMARY

Recurrence of a diastematomyelia is not documented in the literature. In our case, progressive neurological deterioration was found many years following removal of the bony spicule, the dural sleeve, and repair of the dural defects. In spite of appropriate surgical therapy, at repeat myelography there was a defect found at the site of the previous bony spicule. The recurrence could be accounted for by scar formation rather than a regrowth of a removed diastematomyelia.

REFERENCES

1. Dale, AJD: Diastematomyelia. *Arch. Neurol. (Chicago),* 20:309-317, March 1969.
2. English, WJ, Maltby, GL: Diastematomyelia in adults. *J. Neurosurg,* 27: 260-264, 1967.
3. Gardner, WJ: The dystraphic states from syringomyelia to anencephaly. *Excerpta Medica Amsterdam,* Chapter VII, 1973.
4. Guthkelch, AN: Diastematomyelia with median septum. *Brain,* 97:729-742, December 1974.
5. Herren, RY, Edwards, JE: Diplomyelia (duplication of the spinal cord). *Arch. Pathol.,* 30:1203-1214, December 1940.
6. Hilal, SK, Marton, D, Pollack, E: Diastematomyelia in children: Radiographic study of 34 cases. *Radiology,* 112:609-621, September 1974.
7. Keim, HA, Greene, AF: Diastematomyelia and scoliosis. *J. Bone Joint Surg. (AM),* 55A:1425-1435, October 1973.
8. Matson, DD, Woods, RP, Campbell JB, Ingraham, FD: Diastematomyelia (Congenital clefts of the spinal cord): Diagnosis and surgical treatment. *Pediatrics,* 6:98-112, 1950.
9. Neuhauser, EBD, Wittenborg, MH Dehlinger, K: Diastematomyelia Transfication of the cord or cauda equina with congenital anomalies of the spine. *Radiology,* 54:659-664 1950.
10. Ollivier, CP: Traite des maladies de la moelle epiniere. Paris, Mequignon Marvis, 3rd Ed., Vol I, 1937.
11. Ritchie, GW, Flanagan, MN: Diastematomyelia. *Can. Med. Assoc. J.* 100:428-433, March 1969.
12. Winter, RB, Haven, JJ, Moe, JH Lagaard, SM: Diastematomyelia and congenital spine deformities. *J. Bone Joint Surg. (AM),* 56:27-39, January 1974.

★
Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
Since 1899
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
1810 Broad Ripple Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indianapolis 46220
Northern Indiana Office: Douglas O. Sellon, Representative
120 LaSalle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332

2 NEW ISMA sponsored insurance plans available to you

Two new essential insurance plans have been added to broaden the range of ISMA sponsored plans. An In-Hospital Protection Plan and a Medicare Supplement Plan brings the total number of supplemental insurance plans to six that are available to eligible member physicians and professional corporations.

NEW PLANS:

IN-HOSPITAL PROTECTION PLAN provides cash benefits of $20 thru $100 per day (when accidental injury or sickness causes hospital confinement). Benefits are payable directly to you, the insured member, and commence the very first day of covered hospitalization. Intensive care and convalescent home benefits included. Spouses and eligible dependent children may be included. Benefits reduce at age 65.

MEDICARE SUPPLEMENT PLAN provides "gap filler" benefits so essential today. Medicare revised their benefits effective January 1, 1979 and these ISMA sponsored plans have been revised to update these changes, supplementing both Medicare Part A and Part B.

OTHER INSURANCE PLANS AVAILABLE:

- **INCOME PROTECTION PLAN** provides an income of up to $2,000 monthly if you are disabled and unable to work due to a covered accident or illness.
- **EXCESS MAJOR MEDICAL PLAN** provides coverage after your present plan is exhausted. Up to $500,000 coverage with a $20,000 deductible. Unlimited surgical schedule and includes extended care and nursing home benefit.
- **OVERHEAD EXPENSE PLAN** provides needed dollars to help you pay off overhead expenses (employees' salaries, rent, utilities, property taxes, etc.) in the event of your covered disability. When disability strikes—your business overhead expenses keep right on going—even when you can't.
- **FAMILY INSURANCE PLAN** provides benefits up to $100,000 in the event of your death.

Underwritten by Continental Casualty Co. and Valley Forge Life Insurance Co., Chicago, Illinois

COUPON

For information on the ISMA sponsored plans including costs, terminations, exclusions, etc.

☐ In-Hospital Protection Plan
☐ Medicare Supplement Plans
☐ Income Protection Plan
☐ Excess Major Medical Plan
☐ Overhead Expense Plan
☐ Family Insurance Plan
☐ Professional Corporation

Dr. _____

Street _____

City _____ Zip _____

Administered by



j. russell townsend and associates

Mail to:
Indiana State Medical Association
3935 North Meridian Street
Indianapolis, Indiana 46208

GONORRHEA:

Recommendations for the Treatment of Uncomplicated and Complicated Gonococcal Infections

Department of Health, Education, and Welfare
Public Health Service
Center for Disease Control
Atlanta, Georgia

CDC Recommended Treatment Schedules, 1978
Note: Physicians are cautioned to use no less than the recommended dosages of antibiotics.

The recommendations in this article were established after deliberation with these therapy consultants:

1. Harold C. New, M.D., College of Physicians and Surgeons, Columbia University;
2. Erwin H. Braff, M.D., San Francisco Department of Public Health;
3. Gary Cunningham, M.D., Southwestern Medical School, Dallas;
4. King K. Holmes, M.D., Ph.D., USPHS Hospital, Seattle;
5. Franklyn Judson, M.D., Department of Health and Hospitals, Denver;
6. William McCormack, M.D., State Laboratory Institute, Boston;
7. Edwin M. Mears, Jr., M.D., New England Medical Center, Boston;
8. John D. Nelson, M.D., Southwestern Medical School, Dallas;
9. Morton Nelson, M.D., Orange County, California;
10. Suzanne M. Sgroi, M.D., Suffield, Conn.;
11. Frederick Sparling, M.D., School of Medicine, The University of North Carolina, Chapel Hill;
12. Lt. Col. Edmund C. Tramont, Walter Reed Army Medical Center, Washington, D.C.

UNCOMPLICATED GONOCOCCAL INFECTIONS IN MEN AND WOMEN

Drug Regimens of Choice:

Aqueous procaine penicillin G (APPG) 4.8 million units injected intramuscularly at two sites, with 1.0 g of probenecid by mouth.

or

Tetracycline hydrochloride* 0.5 g by mouth 4 times a day for 5 days (total dosage 10.0 g). Other tetracyclines are not more effective than tetracycline hydrochloride. All tetracyclines are ineffective as a single-dose therapy.

or

Ampicillin 3.5 g, or amoxicillin 3.0 g, either with 1 g probenecid by mouth. Evidence shows that these regimens are slightly less effective than the other recommended regimens.

Patients who are allergic to the penicillins or probenecid should be treated with oral tetracycline as above. Patients who cannot tolerate tetracycline may be treated with spectinomycin hydrochloride 2.0 g in one intramuscular injection.

Special Considerations:

- Single-dose treatment is preferred in patients who are unlikely to complete the multiple-dose tetracycline regimen.
- The APPG regimen is preferred in men with anorectal infection.
- Pharyngeal infection is difficult to treat; high failure rates have been reported with ampicillin and spectinomycin.
- Tetracycline treatment results in fewer cases of postgonococcal urethritis in men.
- Tetracycline may eliminate coexisting chlamydial infections in men and women.
- Patients with incubating syphilis (seronegative, without clinical signs of syphilis) are likely to be cured by all the above regimens except spectinomycin. All patients should have a serologic test for syphilis at the time of diagnosis.
- Patients with gonorrhea who also have syphilis or are established contacts to syphilis should be given additional treatment appropriate to the stage of syphilis.

Treatment of Sexual Partners:

Men and women exposed to gonorrhea should be examined, cultured and treated at once with one of the regimens above.

Follow-up:

Follow-up cultures should be obtained from the infected site(s) 3-7 days after completion of treatment. Cultures should be obtained from the anal canal of all women who have been treated for gonorrhea.

Treatment Failures:

The patient who fails therapy with penicillin, ampicillin, amoxicillin, or tetracycline should be treated with 2.0 g of spectinomycin intramuscularly.

Most recurrent infections after treatment with the recommended schedules are due to *reinfection* and indicate a need for improved contact tracing and patient education. Since infection by penicillinase (β-lactamase)-producing *Neisseria gonorrhoeae* is a cause of treatment failure, posttreatment isolates should be tested for penicillinase production.

Not Recommended:

Although long-acting forms of penicillin (such as benzathine penicillin G) are effective in syphilotherapy, they have NO place in the treatment of gonorrhea. Oral penicillin preparations such as penicillin V are not recommended for the treatment of gonococcal infection.

PENICILLINASE-PRODUCING NEISSERIA GONORRHOEAE (PPNG)

Patients with uncomplicated PPNG infections and their sexual contacts should receive spectinomycin 2.0 g intramuscularly in a single injection. Because gonococci are very rarely resistant to spectinomycin and reinfection is the most common cause of treatment failure, patients with positive cultures after spectinomycin therapy should be re-treated with the same dose.

A PPNG isolate that is resistant to spectinomycin may be treated with cefoxitin 2.0 g in a single intramuscular injection, with probenecid 1.0 g by mouth.

*Food and some dairy products interfere with absorption. Oral forms of tetracycline should be given 1 hour before or 2 hours after meals.

TREATMENT IN PREGNANCY

All pregnant women should have endocervical cultures for gonococci as an integral part of the prenatal care at the time of the first visit. A second culture late in the third trimester should be obtained from women at high risk for gonococcal infection.

Drug regimens of choice are APPG, ampicillin or amoxicillin, each with probenecid as described above.

Women who are allergic to penicillin or probenecid should be treated with spectinomycin.

Refer to the section on acute salpingitis and disseminated gonococcal infections for the treatment of these conditions during pregnancy. Tetracycline should not be used in pregnant women because of potential toxic effects for mother and fetus.

ACUTE SALPINGITIS (PELVIC INFLAMMATORY DISEASE)

There are no reliable clinical criteria on which to distinguish gonococcal from nongonococcal salpingitis. Endocervical cultures for *N. gonorrhoeae* are essential. Therapy should be initiated immediately.

Hospitalization should be strongly considered in these situations:

1. Uncertain diagnosis, in which surgical emergencies such as appendicitis and ectopic pregnancy must be excluded.
2. Suspicion of pelvic abscess.
3. Severely ill patients.
4. Pregnancy.
5. Inability of the patient to follow or tolerate an outpatient regimen.
6. Failure to respond to outpatient therapy.

Antimicrobial Agents:

Outpatients:

Tetracycline* 0.5 g taken orally 4 times a day for 10 days. This regimen should not be used for pregnant patients.

or

APPG 4.8 million units intramuscularly, ampicillin 3.5 g or amoxicillin 3.0 g each with probenecid 1.0 g. Either regimen is followed by ampicillin 0.5 g or amoxicillin 0.5 g orally 4 times a day for 10 days.

Hospitalized patients:

Aqueous crystalline penicillin G 20 million units given intravenously each day until improvement occurs, followed by ampicillin 0.5 g orally 4 times a day to complete 10 days of therapy.

or

Tetracycline* 0.25 g given intravenously 4 times a day until improvement occurs, followed by 0.5 g orally 4 times a day to complete 10 days of therapy. This regimen should not be used for pregnant women. The dosage may have to be adjusted if renal function is depressed.

Since optimal therapy for hospitalized patients has not been established, other antibiotics in addition to penicillin are frequently used.

Special Considerations:

- Failure of the patient to improve on the recommended regimens does not indicate the need for stepwise additional antibiotics but requires clinical reassessment.
- The intrauterine device is a risk factor for the development of pelvic inflammatory disease. The effect of removing an intrauterine device on the response of acute salpingitis to antimicrobial therapy and on the risk of recurrent salpingitis is unknown.
- Adequate treatment of women with acute salpingitis must include examination and appropriate treatment of their sex partners because of their high prevalence of nonsymptomatic urethral infection. Failure to treat sex partners is a major cause of recurrent gonococcal salpingitis.
- Followup of patients with acute salpingitis is essential during and after treatment. All patients should be recultured for *N. gonorrhoeae* after treatment.

ACUTE EPIDIDYMITIS

Acute epididymitis can be caused by *N. gonorrhoeae, Chlamydia* or other organisms. If gonococci are demonstrated by Gram stain or culture of urethral secretions, treatment should be:

APPG 4.8 million units, ampicillin 3.5 g or amoxicillin 3.0 g, each with probenecid 1.0 g. Either regimen is followed by ampicillin 0.5 g or amoxicillin 0.5 g orally 4 times a day for 10 days.

or

Tetracycline* 0.5 g orally 4 times a day for 10 days.

If gonococci are not demonstrated, the above tetracycline regimen should be used.

DISSEMINATED GONOCOCCAL INFECTION

Equally effective treatment schedules in the arthritis-dermatitis syndrome include:

Ampicillin 3.5 g or amoxicillin 3.0 g orally, each with probenecid 1.0 g, followed by ampicillin 0.5 g or amoxicillin 0.5 g 4 times a day orally for 7 days.

or

Tetracycline* 0.5 g orally 4 times a day for 7 days. Tetracycline should not be used for complicated gonococcal infection in pregnant women.

or

Spectinomycin 2.0 g intramuscularly twice a day for 3 days (treatment of choice for disseminated infections caused by PPNG).

or

Erythromycin 0.5 g orally 4 times a day for 7 days.

or

Aqueous crystalline penicillin G 10 million units intravenously per day until improvement occurs, followed by ampicillin 0.5 g 4 times a day to complete 7 days of antibiotic treatment.

Special Considerations:

- Hospitalization is indicated in patients who may be unreliable, have uncertain diagnosis, or have purulent joint effusions or other complications.
- Open drainage of joints other than the hip is not indicated.
- Intra-articular injection of antibiotics is unnecessary.

Meningitis and endocarditis caused by the gonococcus require high-dose intravenous penicillin therapy. In penicillin-allergic patients with endocarditis, desensitization and administration of penicillin is indicated; chloramphenicol may be used in penicillin-allergic patients with meningitis.

GONOCOCCAL INFECTIONS IN PEDIATRIC PATIENTS

With gonococcal infections in children beyond the newborn period the possibility of sexual abuse must be considered. Genital, anal and pharyngeal cultures should be obtained from all patients before antibiotic treatment. Appropriate cultures should be obtained from individuals who have had contact with the child.

PREVENTION OF GONOCOCCAL OPHTHALMIA

When required by State legislation or indicated by local epidemiologic considerations, effective and acceptable regimens for prophylaxis of neonatal gonococcal ophthalmia include:

Ophthalmic ointment or drops containing tetracycline or erythromycin.

or

One per cent silver nitrate solution.

Special Considerations:

- Bacitracin is not recommended.
- The value of irrigation after application of silver nitrate is unknown.

MANAGEMENT OF INFANTS BORN TO MOTHERS WITH GONOCOCCAL INFECTION

The infant born to a mother with gonorrhea is at high risk of infection and requires treatment with a single intravenous or intramuscular injection of aqueous crystalline penicillin G 50,000 units to full-term infants or 20,000 units to low-birth-weight infants. Topical prophylaxis for neonatal ophthalmia is not adequate treatment. Clinical illness requires additional treatment.

NEONATAL DISEASE

Gonococcal Ophthalmia: Patients should be hospitalized and isolated for 24 hours after initiation of treatment. Untreated gonococcal ophthalmia is highly contagious. Aqueous crystalline penicillin G 50,000 units/kg/day in 2 doses intravenously should be administered for 7 days. Saline irrigation of the eyes should be performed as needed. Topical antibiotic preparations alone are not sufficient or required when appropriate systemic antibiotic therapy is given.

Complicated Infection: Patients with arthritis and septicemia should be hospitalized and treated with aqueous crystalline penicillin G 75,000 to 100,000 units/kg/day intravenously in 2 or 3 divided doses for 7 days. Meningitis should be treated with aqueous crystalline penicillin G 100,000 units/kg/day, divided into 3 or 4 intravenous doses, and continued for at least 10 days.

CHILDHOOD DISEASE

Children who weigh 100 lbs. (45 kg) or more should receive adult regimens. Children who weigh less than 100 lbs. should be treated as follows:

Uncomplicated Disease:

Uncomplicated vulvovaginitis, urethritis, proctitis or pharyngitis can be treated at one visit with:

Amoxicillin 50 mg/kg orally with probenecid 25 mg/kg (maximum 1.0 g).

or

Aqueous procaine penicillin G 100,000 units/kg intramuscularly plus probenecid 25 mg/kg (maximum 1.0 g).

Special Considerations:

- Topical and/or systemic estrogen therapy are of no benefit in vulvovaginitis.
- Long-acting penicillins, such as benzathine penicillin G, are not effective.
- All patients should have follow-up cultures and the source of infection should be identified, examined and treated.

Gonococcal Ophthalmia:

Ophthalmia in children is treated as in neonates but the dose of penicillin is increased to 100,000 units/kg/day intravenously.

Complicated Infections:

Patients with peritonitis or arthritis require hospitalization and treatment with aqueous crystalline penicillin G, 100,000 units/kg/day intravenously for 7 days. Aqueous crystalline penicillin G 250,000 units/kg/day intravenously in 6 divided doses for at least 10 days is recommended for meningitis.

Allergy to Penicillins:

Children who are allergic to penicillins should be treated with spectinomycin 40 mg/kg intramuscularly. Children older than 8 years may be treated with tetracycline 40 mg/kg/day orally in 4 divided doses for 5 days. For treatment of complicated disease, the alternative regimens recommended for adults may be used in appropriate pediatric dosages.



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS

Operated by PHYSICIANS

For the protection of PHYSICIANS

P&SLI

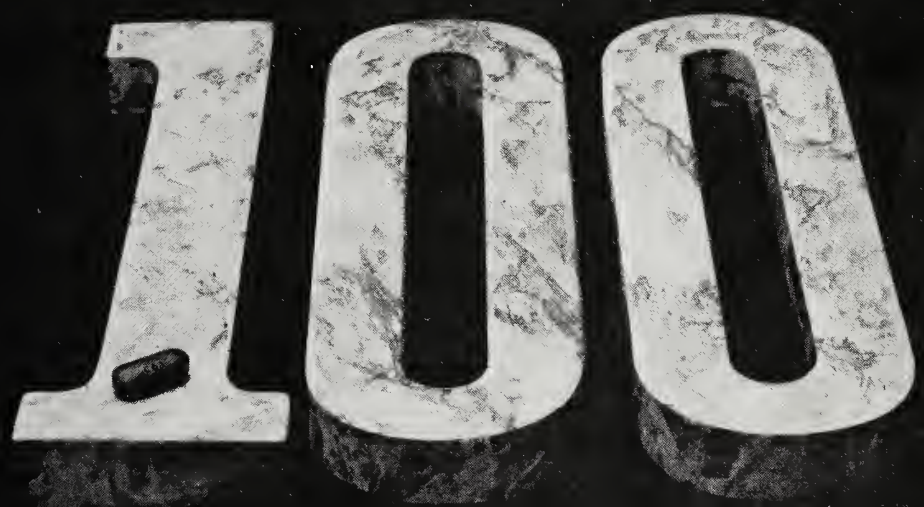
Physicians & Surgeons Liability Insurance Co., Inc
800 MacArthur Boulevard / Munster, Indiana 46321
219 836-2288

contains no aspirin

tablets

Darvocet-N® 100 Ⓘⓥ

100 mg. Darvon-N® (propoxyphene napsylate)
650 mg. acetaminophen



Lilly

Additional information available to the profession on request from Eli Lilly and Company Indianapolis, Indiana 46206

700565

Eli Lilly and Company, Inc.
Carolina, Puerto Rico 00630

BOOK REVIEWS



Atlas of Dermatology

Gernot Rassner, M.D., Ulm, assisted by Monika Knickenberg, M.D., Ulm, Copyright 1978. Translated and edited by Guinter Kahn, M.D., Miami. Urban & Schwarzenberg, 7 E. Redwood St., Baltimore, Md. 21202. 195 pages, plus index and 201 color illustrations, $24.

This atlas deserves extraordinarily high grades on several counts. First, its extensive introduction lays down the basics of dermatology graphically and with complete clarity. But the remarkable value of this volume lies in its photographs, all in splendid and accurate color, and in the descriptive material accompanying them. For these cover the wide spectrum of diseases of the skin, under the headings of:

- Diseases of the Cutis (the epidermis and the dermis)
- Diseases of the Skin Appendages
- Diseases of the Pigmentary System of the Skin
- Diseases of the Subcutaneous Tissue
- Diseases of the Blood Vessels of the Skin
- Diseases of the Nervous System of the Skin
- Diseases of the Lips and Oral Mucosa
- Diseases of the Perianal Region and Anal Canal
- Diseases of the External Genitalia

The photography is superb, presenting as it does the lesions exactly as they appeared.

The family practitioner is frequently confronted with lesions that may try his diagnostic skill. So, no doubt, is the internist. This superb atlas is the best your reviewer has ever examined; it is heartily recommended for both these important specialty groups.

The volume is bound in unusually sturdy hardcover. It is enthusiastically recommended for anyone concerned with diseases of the integument.

W. D. SNIVELY, Jr., M.D.
Internal Medicine
Evansville

Fever

There's a Word for It

RICHARD J. NOVEROSKE, M.D
Evansville

A *fever* or *elevated temperature* is often seen in a physician's office practice and in hospital patients, too. It can be a useful indicator of whether the patient is well or not, helpful in differential diagnosis, and can be used to evaluate the patient's clinical progress. We chart the patient's temperature and call it a *fever* when the temperature is elevated.

But one often hears people say, "He has a temperature." I think this is acceptable if the person who is saying it is not educated. But for an educated person to say, "He has a temperature," when he is speaking about a person who has a fever, who is febrile, is wrong.

Temperature is a dimension of all things, alive or inert. Not only living beings, but also rocks, books, furniture, water, soil, and the air around us have a temperature that can be measured; it is a universal dimension. So it is redundantly stupid to say, "he has a temperature." Of course he has a temperature. He is a being.

The point is that he has a fever; he is febrile, or he has an elevated temperature, and that is what we should say.



Wouldn't you feel better knowing money experts were looking after their best interests?

They're totally dependent upon you. And they may be for a long time. It's not a pleasant thought, but what happens if you're not here when they need you?

In a crisis, your family needs professional money management. And advice they can count on. That's just what they'll get from the people in our Personal Trust Group. People like Eric Manterfield. Eric understands the complexities of probating an estate. His approach is compassionate. Eric's expertise is your assurance that your family's interests will be fairly and accurately represented.

All your life you've worked to make your family secure. Maximize their security, now while you're thinking about it. Give Eric a call at 639-8212. He will work with your attorney to develop a sound estate plan to protect your family.

Professional, personal, trust services. Another way we're proving, we want to be your bank.



Personal Trust Group

AMERICAN FLETCHER NATIONAL BANK **AFNB**

NEWS NOTES

Medical Journals Threatened?

MEDICAL ECONOMICS reports that the I.R.S. is threatening to revoke the tax-exempt status that has long been accorded scientific publications. That would mean higher postal rates plus taxation of ad revenues and other income—a financial blow that many medical journals might not survive. Imperiled by the move could be the 10 AMA-sponsored professional magazines, state medical journals and the specialty journals.

Physician Fee Increases Lag

American doctors have succeeded in holding down the rate of increase in physicians' fees, according to statistics released by the U.S. Bureau of Labor Statistics. The all-items component of the Consumer Price Index rose 9% from December 1977 to December 1978; medical care cost rose 8.8% in the same period. Physicians' fees rose only 7.8%. Thus, inflation in the general economy exceeded the rise in medical costs over the past year.



HANGER PROSTHESES OFFERS BOOKLET ON AMPUTATIONS

This baaklet has been designed for thase physicians whose practice includes amputatian. Limb Prasthetics gives ready reference far each site af amputatian as well as the prostheses recammended for each site.

Over 100 years af experience gained by the Hanger arganizatian have gane inta this carefully illustrated baaklet. Illustrations include amputatian sites far the leg and the arm, variaus Hanger prastheses and methads af suspensian, past-aperative care and preparatian far prasthesis, plus selected phatagraphs shawing the child amputee and training far the abave-knee patient.

We believe that yau will find Limb Prasthetics a mast useful baaklet and a valuable source af quick infarmatian. Ta abtain yaur copy, please write ar phane the Hanger affice nearest yau.

Hanger PROSTHESES

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807



BETWEEN THIS AND GARAGE SALES, I KEEP BUSY.

Diplomates

The following ISMA members have been named diplomates of the organizations indicated:

American Board of Family Practice:
Dr. Amal K. Das, Kokomo.
American Board of Internal Medicine:
Dr. Swaroop Rai, Huntingburg;
Dr. Allen D. Scales, Huntingburg.

'When Your Child Is Sick'

A new public affairs pamphlet, "When Your Child Is Sick," by Jacqueline Seaver and June V. Schwartz, M.D., describes symptoms and situations in which a doctor should be called. It also explains how to handle a child's emotional responses to illness, and what to do about fever, colds, sore throat, earache, croup and other ailments. This 24-page booklet is available for 50 cents from Public Affairs Committee, 381 Park Ave. South, New York City 10016.

Guides to AMA Pamphlets

The AMA has published two updated pamphlets that list AMA publications, copies of which are available free of charge.

One, entitled "Professional Medical Information," is designed for the physician and refers to publications on medical practice, general and scientific subjects and statistical data. The other, entitled "AMA Publications . . . to help you lead a healthier, happier life," is designed for the general public.

Write Order Department, AMA, P.O. Box 821, Monroe, Wis. 53566.

NEWS NOTES

ISMA Membership Roll

The Indiana State Medical Association welcomes the following new members:

Delaware-Blackford County:
Antalik, Thomas A., Muncie
Surgery, General
Basavara, Hiremat, Muncie
Anesthesiology
Durbin, John P., Muncie
Surgery, General
McKnight, Russell D., Muncie
Family Practice
Murray, Patrick D., Muncie
Surgery, Orthopedic
Yocum, Michael W., Muncie
Allergy

Floyd County:
Akin, Daniel P., New Albany
Otorhinolaryngology
Gardner, Richard P., New Albany
Psychiatry
McCullough, James Y., New Albany
Surgery, General
Payne, James D., New Albany
Family Practice

Allen County:
Amin, Yogeschandra M., Fort Wayne
Internal Medicine
Bradenberger, E. Jon, Fort Wayne
Family Practice
Cole, Stephen L., Fort Wayne
Family Practice
Hawk, James A., Fort Wayne
Family Practice
Mohrman, John S., Fort Wayne
Family Practice
Shealy, Thomas A., Fort Wayne
Ophthalmology
Stucky, Mitchell B., Fort Wayne
Family Practice
Wallace, John M., Fort Wayne
Family Practice

Grant County:
Shepard, William D., Marion
Surgery, Orthopedic

Marion County:
Fogle, Norman L., Indianapolis
Family Practice
Hardman, Donald R., Indianapolis
Radiology, Diagnostic
Horine, Randall K., Indianapolis
Internal Medicine
Jager, Rama M., Indianapolis
Surgery, Colon and Rectal
McLaughlin, Gordon C., Indianapolis
Radiology, Diagnostic
Perkins, Beverley J., Indianapolis
Family Practice
Rehn, Charles E., Indianapolis
Neurology
Zieverink, Sara E., Indianapolis
Radiology, Diagnostic

Lake County:
Kencos, John, Niles, III
Internal Medicine
Krishna, Dev B.N., Merrillville
Surgery, General

Owen-Monroe County:
Frasure, James S., Bloomington
Emergency Medicine

Porter County:
Donauer, Robert M., Merrillville
Internal Medicine

Posey County:
Vogel, Gordon A., Mount Vernon
Internal Medicine

St. Joseph County:
Carpenter, Pramod K., South Bend
Pathology

Tippecanoe County:
Kaplan, Joshua M., Lafayette
Surgery, Plastic
Perez, J. Michael, Lafayette
Surgery, Urological

Vanderburgh County:
Brown, Jay A., Evansville
Family Practice
Connors, James J., Evansville
Pediatrics
Crane, David M., Evansville
Emergency Medicine
Diotellevi, Gary H., Evansville
Family Practice
Houser, William C., Evansville
Internal Medicine
Robinson, Layne, D., Evansville
Family Practice
Schuler, Graham T., Evansville
Family Practice

Wabash County:
Millabashy, Djavad, Wabash
Anesthesiology

Wells County:
Balamohan, Ramalingam, Bluffton
Cardiovascular Diseases



McClain Car Leasing, Inc.

1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA

NEWS NOTES

Fellowships

Dr. G. L. Schaefer of Franklin has been admitted to Fellowship in the American College of Obstetricians and Gyneocologists.

Admitted to Fellowship in the American College of Cardiology were **Dr. Ian R. Gardner, Dr. John L. Rubush, Dr. Paul F. Howard and Dr. William S. Sarnat,** all of South Bend.

Dr. Robert K. Ellis of Elkhart has become a Fellow of the American Academy of Orthopaedic Surgeons.

Dr. Swaim's Book Published

Dr. J. Franklin Swaim, a Rockville general practitioner, has realized one of his life's ambitions, namely, to write a book.

"One Year and Eternity" (Vantage Press, 218 pages, $7.50) tells the story of his year of service as a U.S. Air Force medic in Vietnam.

Dr. Swaim describes his book as "a written documentary of what I heard and observed." He served in Vietnam in 1966 and 1967.

Dearborn County Hospital On Cue

"The Heart and You" was the name of a television special aired in Dearborn County as part of Channe 6's regularly scheduled program, "Call Your Doctor."

The show was telecast from the physicians' lounge at Dearborn County Hospital in Lawrenceburg, with Dr. Vijender Goel as moderator. The panel included Dr. Leslie Baker, Dr. Harbans Gill and Dr. Frederick Schnell, plus a dietician and other hospital staf members.

The public was given the chance to call in and ask questions of anyone on the panel.

Here and There . . .

. . . **Dr. Jean Terrin** of Carmel has been appointed Hamilton County health officer.

. . . **Dr. James R. VanKirk** has been reappointed health officer for West Lafayette.

. . . **Dr. Roy Patton** of Indianapolis has been appointed by Governor Bowen to the State Board o Mental Health for a three-year term.

FOX HUNTING SEASON NOW OPEN!

You have to be smart to capture a Fox, the sporty 5-passenger sedan from Audi. With features like front wheel drive, rack-and-pinion steering and 0 to 50 in 8.1 seconds, it also helps to be quick. Giganti only gets a limited number. So buy now, before the Fox hunting season is over.



GIGANTI VOLKSWAGEN PORSCHE AUDI
INC.
6901 East 38th Street
Indianapolis, Indiana
545-4211

1978 Service Honor we care AWARD WINNER

NEWS NOTES

Dr. Scamahorn Wins AMA Award



The AMA has named Dr. Malcolm O. Scamahorn of Pittsboro first-place winner in the Testimony Category of its annual speakers competition.

Dr. Scamahorn, a general practitioner for 36 years, was cited for testimony presented to the 1978 Indiana General Assembly on behalf of the ISMA. He spoke concerning a drug substitution bill, opposed by most Hoosier physicians because it would have allowed pharmacists the option of substituting a generic for a brand name drug.

Dr. Scamahorn, an Indiana delegate to the AMA since 1972, was awarded a plaque and $1,000 for his achievement. He has since presented the monetary award to the ISMA for its use on behalf of medicine.

The 60-year-old physician, a fellow of the American Academy of Family Physicians, told last year's lawmakers that, in spite of the "highly publicized savings on generic drugs," such savings "are so small as to be insignificant."

He pointed out that doctors should be responsible for selecting the drug for a patient, based primarily on the patient's therapeutic needs and his well-being in the event of an unfavorable response to the treatment.

The bill was eventually defeated.

Dr. Scamahorn, who currently serves on the AMA's Council on Medical Service, is a past president of the ISMA and the Hendricks County Medical Society.

Admission Batteries May Be Out

The Medical Necessity Project of the Blue Cross and Blue Shield Associations is recommending that member plans pay for hospital "admission batteries" for medical (non-surgical) patients only when specifically ordered by a physician. Routine payment for 26 diagnostic laboratory procedures now considered outmoded, unnecessary, unreliable or of no proven value would be phased out. The recommendation on admission batteries was made after consultation with the American College of Physicians. The recommendation on diagnostic laboratory procedures followed consultation with the ACP and the College of American Pathologists. Dr. James H. Sammons of the AMA said the Blues' recommendations, if reasonably applied, should result in savings for patients and contribute to the health industry's Voluntary Effort to reduce hospital costs.

Medicare Billing Reminder

County medical societies are reminded that AMA policy on direct billing under Medicare calls on the physician to "report fully and specifically in his billing the nature of the services provided so that the patient may be properly reimbursed by the Medicare carrier" and to "guide his patient in his application for reimbursement."

Public Health Survey

The U.S. Public Health Service plans to visit Marion County to conduct the Health and Nutrition Examination Survey of persons aged 6 months through 74 years. The initial phase will begin May 21, with interviewers from the U.S. Bureau of the Census calling on selected households to obtain demographic information to identify and select about 415 persons for the examination. The exams will be conducted May 31-July 3 in the survey's mobile examination center. Questions concerning the survey should be directed to Mr. Philip W. Howley, Public Health Service, Hyattsville, Md. Tel: (301) 436-8267.

CANOE the Gunflint-Quetico

Start your canoe trip in the heart of the Boundary Waters Canoe Area. Our base is the northernmost on the famous Gunflint Trail . . . closest to the great fishing and wilderness experience you're looking for. Write today for canoe trip planning kit—

Northpoint OUTFITTERS

Gunflint Trail (I)
Grand Marais, MN 55604



NEWS NOTES



I SUPPOSE THIS MEANS I'LL HAVE TO GIVE UP JOGGING FOR A WHILE.

Hospital Elections

Community Hospital, Anderson—Dr. William Van Ness II, president; Dr. Frank Campbell, vice-president; Dr. Everett Gaunt, chief of staff; Dr. Paul Ramsey, secretary-treasurer.

Gibson General Hospital, Princeton—Dr. R. E. Weitzel, president; Dr. W. E. Dye, vice-president; Dr. B. C. Brink, secretary-treasurer.

St. Joseph's Hospital, Huntingburg—Dr. Harry Craig, chief of staff; Dr. Sohrab Amini, vice chief of staff.

St. Mary Medical Center, Gary and Hobart—Dr. Pierre L. Gilles, president; Dr. Raffy Hovanessian, president-elect; Dr. Oscar de la Paz, secretary; Dr. Srbislav Brasovan, treasurer.

Reid Memorial Hospital, Richmond—Dr. Olin Wiland, chief of staff; Dr. James Lewis, chief of staff-elect; Dr. Alfred Hollenberg, secretary-treasurer.

St. Joseph Memorial Hospital, Kokomo—Dr. R. J. Brown, president; Dr. R. R. Gaboya, president-elect; Dr. J. E. Whitfield, secretary.

St. Joseph's Hospital, South Bend—Dr. Ernest B. Jankowski, president; Dr. George M. Haley, vice-president; Dr. Stephen L. Anderson, secretary-treasurer.

Porter Memorial Hospital, Valparaiso—Dr. Roy Kingma, chief of staff.

Physician Recognition Awards

The following Indiana physicians are recent recipients of the AMA's Physician Recognition Award. This award is official documentation of Continuing Medical Education hours earned, and is acceptable proof in most states requiring CME in re-registration that the mandatory hours of CME have been accomplished.

Adler, Fred, Munster
Ahuja, Girdhar L., Indianapolis
Atkins, Clayton H., Greenwood
Ball, George M., Marion
Benchik, Frank A., East Chicago
Bhatt, Pallavi K., Boonville
Black, M. James, Brownsburg
Brennan, William C., Highland
Bryant, Edward G., East Chicago
Burg, Howard E., Evansville
Cabrera, Pelayo B., Crown Point
Campagna, Edward A., East Chicago
Chona, Alfred, East Chicago
Constan, Evan, Westville
Couch, William H., Fort Wayne
Crawford, John N., Fort Wayne
Dehner, John R., Richmond
Dilts, Robert L., Indianapolis
Dimailig, Gregorio H., East Chicago
Ellis, George M., Connersville
Farr, James C., Bloomington
Fisher, Pierre J., Marion
Gailani, Salman D., East Chicago
Galinis, Algimantas J., Michigan City
Grosso, William G., East Chicago
Grosz, Hanus J., Indianapolis
Hamang, Peter M., Hobart
Harper, James W., East Chicago
Higgins, James L., Evansville
Hughes, Charles E., Indianapolis
Hummel, Russel M., Marion
Knight, Ernest L., Elkhart
Kreitl, Dorothy M. R., Richmond
Krueger, Thomas P., Evansville
Liebner, Michael S., Logansport
Madarang, Napoleon M., Hammond
Magno, Jose N., Marion
Mangahas, Jovencio P., Hammond
Massuda, Yacoub, Valparaiso
Mock, Lawrence F., Bluffton
Mok, Lynn C., Evansville
Moores, William B., Indianapolis
Mudrony-Szoke, Jeno B., Bluffton
Paine, George E., Bristol
Panos, Constantine G., Bluffton
Reitman, Paul H., East Chicago
Reynolds, John L., Martinsville
Ritz, Albert S., Evansville
Roth, Bertram S., Indianapolis
Rougraff, Maurice E., Indianapolis
Russell, John R., Indianapolis
Shaw, Glenn R., Bluffton
Silvero, Hubert L., Fort Wayne
Sinkovic, Gerald M., Indianapolis
Sinn, Charles M., Evansville
Smyrniotis, Fotius E., Marion
Stratigos, Joseph S., South Bend
Stucky, Jerry L., Fort Wayne
Swaim, J. Franklin, Rockville
Thomas, Daniel D., Gary
Troy, Jack M., Munster
Walker, Adolph P., Munster
Weiss, Robert M., Floyds Knobs
Wells, William R., Princeton
Wu, L. Y. Frank, Indianapolis

CME QUIZ

Exercise-Induced Asthma

CONTINUED FROM PAGES 259-262

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: Indiana University School of Medicine, Division of Postgraduate and Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46202.

ANSWER THE FOLLOWING:

1. Exercise-induced asthma should be considered as a separate entity from childhood asthma.
 T F

2. Characteristically, exercise-induced asthma can be effectively controlled by the use of corticosteroids.
 T F

3. The usual pattern of variation in pulmonary function studies with exercise in exercise-induced asthma is an initial bronchodilation followed by varying degrees of bronchoconstriction.
 T F

4. Which of the following are factors associated with the severity of bronchoconstriction seen in E.I.A.
 (a) the duration of exercise
 (b) the type of exercise
 (c) the severity of the exercise
 (d) the season of the year
 (e) all of the above

5. Which of the following medications have been shown to be beneficial in the control of exercise-induced asthma.

(a) sympathomimetic agonists	T	F
(b) theophylline preparations	T	F
(c) sodium cromoglycate	T	F
(d) atropine or atropine-like drugs	T	F
(e) corticosteroids	T	F

6. Ideally, medications to prevent exercise-induced asthma should be given a minimum of 30 minutes prior to exercise and depending upon the preparation, expected to be effective from 2 to 4 hours.
 T F

The following are answers to the CME quiz that appeared in the January 1979 issue of THE JOURNAL. The article upon which the questions were based was "Observations on Diverticular Disease of the Colon" by John E. Jesseph, M.D.

1. c	5. b
2. a	6. d
3. d	7. c
4. e	8. a

Complete this form to obtain verification for one hour of Category 1 AMA CME credit.

Answer sheet for Quiz: (Asthma . . .)

1. T F	5. a — T F
2. T F	b — T F
3. T F	c — T F
4. a b c d e	d — T F
	e — T F
	6. T F

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in a later issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before June 15, 1979, to the address appearing at the top of this page.

PHYSICIANS' DIRECTORY

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurological Surgery

1815 North Capitol Avenue Indianapolis 46202

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY
5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Training for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

OPHTHALMIC PLASTIC SURGERY

Robert D. Deitch, M.D., F.A.C.S.

Fellow of the American Association of Ophthalmic Plastic and Reconstructive Surgery

St. Francis Medical Arts Building
1500 Albany Street Suite 801
Beech Grove, Indiana 46107

PHONE ANSWERED 24 HOURS (317) 783-6187

INTERNAL MEDICINE

Offices for the doctors listed below are located at 3130 N. Meridian St., Indianapolis 46208; the switchboard number is 317-927-1221.

MERIDIAN MEDICAL GROUP

CARDIOLOGY
Richard M. Nay, M.D.
Warren E. Coggeshall, M.D.
Richard R. Schumacher, M.D.
William C. Elliott, M.D.

HEMATOLOGY—ONCOLOGY
Laurence H. Bates, M.D.
William M. Dugan, M.D.
James E. Schroeder, M.D.
Frank A. Workman, M.D.
Deborah S. Provisor, M.D.
Pediatrics

METABOLISM AND ENDOCRINOLOGY
William M. Holland, M.D.

GASTROENTEROLOGY
Robert D. Pickett, M.D.
B. T. Maxam, M.D.
Lee G. Jordan, M.D.
Martin P. Meisenheimer, M.D.

INTERNAL MEDICINE
Hunter A. Soper, M.D.
Douglas H. White, Jr., M.D.
Michael B. DuBois, M.D.
Nephrology
Michael P. Bubb, M.D.
Robert L. Iverson, Jr., M.D.
Critical Care
Michael Zeckel, M.D.
Infectious Diseases

INFECTIOUS DISEASES
Thomas G. Slama, M.D.

NEUROLOGY
Norman W. Oestrike, M.D.
Charles Rehn, M.D.

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Ahearn, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegeman, M.D.
Douglas F. Johnstone, M.D.
LeRoy H. King, Jr., M.D., FACP

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capital, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
PAUL M. FLANAGAN, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

PSYCHIATRY

JOHN H. GREIST, M.D.

Diplomate, Board of Neurology and Psychiatry

Specializing in Psychiatry

3231 North Meridion Street Indianapolis 46208

GORDON T. BROWN, M.D.

Diplomate, American Board of Psychiatry and Neurology
Adult and Adolescent
Psychotherapy, Consultation, Evaluation

Tel: (317) 923-3269
3266 North Meridian Street Indianapolis 46208

HAND SURGERY

By appointment Phone 317-783-1319

VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.
Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery

5530 S. Keystone, Suite 305 Indianapolis 46227

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

ALLERGY

INDIANA ASTHMA & ALLERGY ASSOCIATES
Specializing in Chronic Severe Asthma
and
Adult and Pediatric Allergic Disorders

D. Duane Houser, M.D., Inc.
(317) 923-7650
and
Douglas J. Horton, M.D.
(317) 923-6990

1815 N. Capital Avenue
Indianapolis, Indiana 46202

Diplomates, American Board of Allergy & Immunalogy Answering Service 926-3466

CARDIOLOGY

WILLIAM K. NASSER, M.D.
MICHAEL L. SMITH, M.D.
CASS A. PINKERTON, M.D.
Cardialogy and cardiac catheterization
8402 Harcourt Road, Room 413 Indianapolis 46260
St. Vincent's Professional Building (317) 257-9316
Physician Referral Only

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.
Certified: American Board of Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons
Specializing in Colon and Rectal Surgery

214 Sherland Building
105 East Jefferson Blvd. South Bend, Ind. 46601

OBITUARIES

Earl W. Mericle, M.D.



Dr. Mericle, 75, an Indianapolis physician who specialized in neuro-psychiatry for 37 years until his retirement in 1973, died March 7 in an Indianapolis nursing home.

A 1934 graduate of the Indiana University School of Medicine and a World War II Army veteran, Dr. Mericle had served as president of the ISMA from 1959-60.

Dr. Mericle was a member of the Governor's Medical Advisory Committee and was named chairman of the professional advisory committee of the Mental Health Association of Indiana in 1970. He was a former member of the boards of directors of the Mental Health Association and Blue Cross/Blue Shield.

He served as staff president of Methodist Hospital in 1952 and was also a past president of the former Marion County General Hospital, now Wishard Memorial Hospital. He had been a senior member of the ISMA since 1974.

Irving Rosenbaum, Jr., M.D.

Dr. Rosenbaum, 67, an Indianapolis pediatrician for 33 years, died Feb. 11 in Methodist Hospital, Indianapolis.

He received his M.D. degree in 1935 from Johns Hopkins University. He was an Army veteran of World War II.

Dr. Rosenbaum had held top posts with the Metropolitan Health Council of Marion County, the Indianapolis Pediatric Society and was co-founder of the Indiana Heart Association in 1950. In 1955 he founded the Indiana poison control program.

Dr. Rosenbaum was a clinical associate professor of pediatrics at the I.U. School of Medicine. He was a former director of the Child Development Clinic of Riley Hospital for Children.

Jerome E. Holman, Sr., M.D.

Dr. Holman, 90, an Indianapolis physician more than 50 years, died Feb. 10 in a Carmel nursing home.

He was a 1914 graduate of Eclectic Medical College in Cincinnati. He retired in 1966.

Dr. Holman, who had been a member of the Indiana Academy of Family Practice, had once served as president of the former Marion County Tuberculosis Sanitorium. He had been a member of the ISMA's 50-Year Club since 1964.

Charles H. Ade, M.D.

Dr. Ade, 70, a Lafayette surgeon, died Feb. 10 in Lafayette Home Hospital.

He was a 1933 graduate of Indiana University School of Medicine. He served in the Army from 1934-38.

Dr. Ade was a member of the International College of Surgeons, the American Society of Oph. and Oto. Allergy, and was a past president of the Tippecanoe County Medical Society. He also was a past president of the Home Hospital staff.

His widow, Dr. Mary E. Ade, is a general practitioner in Lafayette.

Walter P. Morton, M.D.

Dr. Morton, 83, a retired Indianapolis urologist, died Feb. 9 in the VA Medical Center, Indianapolis.

Dr. Morton, an Army veteran of World War I, was a 1920 graduate of the Indiana University School of Medicine.

He was certified by the American Board of Urology and had been a member of ISMA's 50-Year Club since 1970.

Jean V. Carter, M.D.

Dr. Carter, 82, a Tipton general practitioner, died Feb. 24 at Methodist Hospital, Indianapolis.

He was a 1923 graduate of the Indiana University School of Medicine. He was a Navy veteran of World War I and an Army veteran of World War II.

Dr. Carter, a former secretary of the Tipton County Medical Society, had become a member of the ISMA 50-Year Club in 1973.

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

FOR LEASE: On Vonderbilt Beoch neor Noples, Flo., two-bedroom, two-both new condominium on the beoch. Docking facilities avoiloble. Tel: (317) 644-6147.

FOR SALE: GP office equipment and furniture. Good condition. Avoiloble in Morch. Call (219) 267-7987 ofter 4 p.m.

AVAILABLE IMMEDIATELY—A Physicion's Assistont with two yeors experience seeking a position with o fomily or general practitioner. Resume and credentiols ovoiloble upon request to Mr. Robert L. Dougherty, 332 S. 20th St., Terre Houte, Ind. 47803.

USED MEDICAL EQUIPMENT ond leftover supplies ovoiloble. Logonsport, Ind. Tel: (219) 753-4792.

LOCUM TENENS—EMERGENCY MEDICINE—ovoiloble in our 100 hospitals; monthly scheduling is flexible and occording to your preferences; molproctice is paid, excellent hourly income according to your flexibility ond hours worked. Coll toll free 1-800-325-3982, ext. 220 for detoils.

CHICAGO AREA EMERGENCY DEPARTMENT DIRECTORSHIP. Progressive 250-bed hospital in community situated outside congested metropoliton area. Emergency Medicine experience and ACLS certificate, or comparable proficiency level required. Excellent minimum guorontee with directorship bonus, flexible rotations, ond superb molpractice program. To inquire, call Bill Solmo at 1-800-325-3982, toll free.

WANTED: Board certified or board eligible internist, generol, or with subspecialty. University community of 40,000 with drawing area of about 100,000. One hour from oceon, mountains or desert. Six months guoronteed income. J.A.C.H. opproved hospitol, licensed for 195 beds. Resume: Box 1506, Loma Linda, Calif. 92354.

OPPORTUNITIES FOR PHYSICIANS—There are current openings among the Indiana State Hospitals ot vorious locotions throughout the State for psychiotrists and physicians of other specialties, at most experience levels. The salary schedule offers a very competitive income plus a generous pockage of fringe benefits. An odjunct proctice is possible beyond the regular working hours and on-call responsibilities. Candidates must be licensoble in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, Ky. 42071 or call (collect) (502) 753-9772. Forrest is retoined by the Indiana Department of Mental Health.

CHICAGO AREA EMERGENCY MEDICINE PRACTICE. Progressive 250-bed hospitol in community situated outside congested metropolitan area. ACLS certificate or comparoble proficiency level required. Excellent minimum guarantee, flexible rotations, and superb malpractice progrom. For details, call Bill Salmo at 1-800-325-3982, toll free.

ANESTHESIOLOGY Resident Training Program seeks quolified Indiona applicants. Experience in generol practice or primary care preferred. Inquire: Lucien E. Morris, M.D., Department of Anesthesia, Medical College of Ohio, Coller Service #10008, Toledo, Ohio 43699.

INDIANA MEDICAL BUREAU

1010 East 86th St.—72 Winterton
Indianapolis 46240
844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique that we have over $4,000,000.00 in personal loans made to Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Colin G. Haza
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis Morris Plan

ADVERTISERS IN THIS ISSUE

April 1979 Vol. 72 No. 4

American Fletcher National Bank 287
Anacomp 221
Blue Cross-Blue Shield 219
Beltone Electronics Corp. 223
Brown Pharmaceutical Co., Inc. 251
Burroughs-Wellcome Co. 233
Commercial Announcements 297
Giganti, Inc. 290
Hanger Prostheses 288
Immke Circle Leasing, Inc. 272
Indiana Medical Bureau 297
Lilly, Eli and Company, Inc. 285
McClain Car Leasing, Inc. 289
Medical Protective Company 278
Morris Plan 298
Merrell-National, Inc. ..224, 225, 248, 249, 250
Merck Sharp & Dohme 238
Mead Johnson Pharmaceutical Div. 257, 258
Northpoint Outfitters 291
P&SLI 284
Physicians' Directory 294
Professional Careers Institute 272
Roche Laboratories ..Covers, 215, 216, 226, 234, 235
Rockwood Insurance Company 229
Smith, Kline & French 247
S-Tek Computer Services, Inc. 239
Townsend, J. Russell and Associates 279
Upjohn Company 236, 237
Warner/Chilcott 263

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

INDIANA STATE MEDICAL ASSOCIATION JOURNAL

May 1979 • Vol. 72 • No. 5

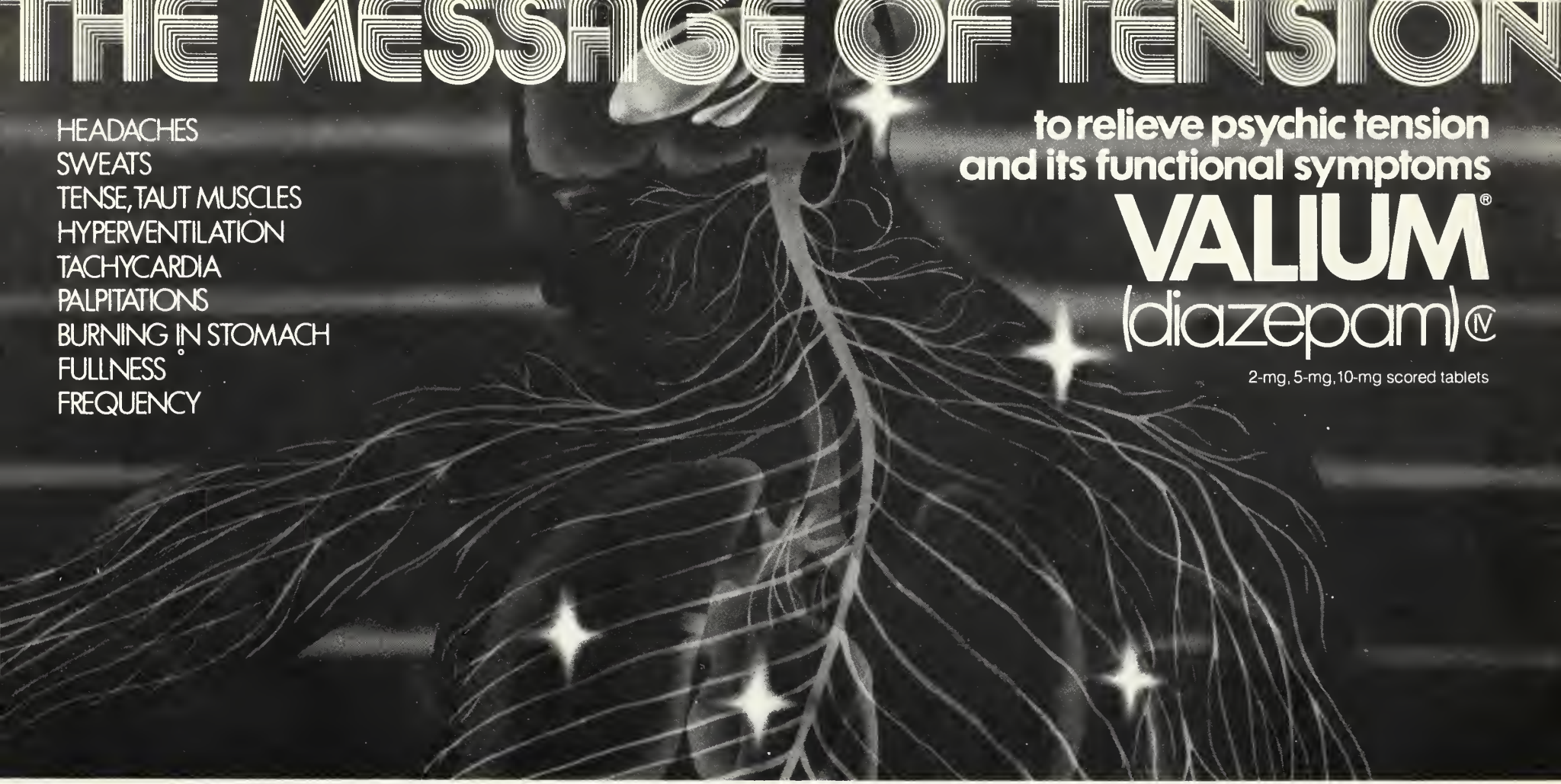
The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION



The Library, Acquisitions Dept.
Univ. of Ca., San Francisco
SAN FRANCISCO, CA 94143

LIBRARY
U.C. SAN FRANCISCO
MAY 24 1979

Inside: **RADIOLOGY OF PLEURAL DISEASE**
Another installment in the Continuing Medical Education Series



VALIUM®(diazepam)

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the indi-

Contraindicated: Known hypersensitivity to the drug Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predispos-

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc
Nutley, New Jersey 07110

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis



John Newell Hurty:

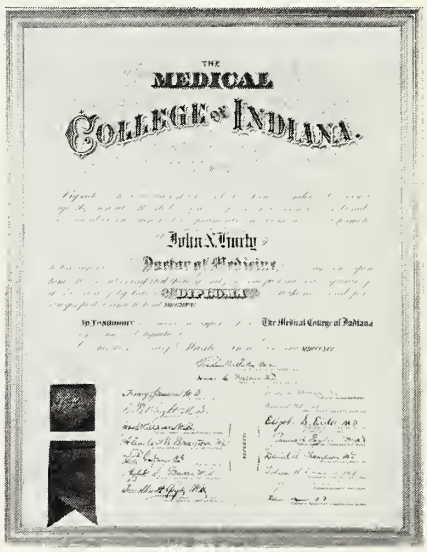
The M.D. Who Never Practiced Medicine

THIS MONTH'S illustration is the M.D. diploma of Dr. John Newell Hurty (featured also in last month's column). Dr. Hurty was 39 years old and a pharmacist when he received this M.D. degree in 1891. He never practiced medicine. How it was that he became secretary of the Indiana State Board of Health five years later (for which the M.D. degree was mandatory) is told most succinctly in the words of Dr. Thurmon B. Rice (ONE HUNDRED YEARS OF INDIANA MEDICINE 1849 - 1949, p. 44).

". . . As a druggist Dr. J. N. Hurty came to work each morning to his drug store and laboratory at the corner of Ohio and Pennsylvania streets where the Federal Building now stands. He rode a bicycle past a row of buildings belonging to the Hon. William English, Sr. There was so much typhoid in this row of buildings that it had come to be known as 'typhoid row.' Dr. Hurty had his own ideas as to what caused typhoid, so he purchased a five-gallon can of kerosene and, under cover of nightfall, went along this row putting about half a gallon of kerosene into each of the privies. The next day, the water of the wells of the neighborhood tasted so strongly of kerosene that it could not be drunk. This was a spectacular demonstration as to the probable cause of typhoid fever, but it didn't make any great hit with William English, who was extremely angry about it. Inasmuch as he (Mr. English) was a political rival of Governor Claude Matthews, the latter was greatly pleased by the Hurty demonstration, and he made inquiry as to who this man, Dr. Hurty, might be. . ."

Soon after this event, Dr. Hurty became secretary of the Indiana State Board of Health.

Dr. Hurty apparently never hung his diploma on the wall. When Dr. Rice wrote chapter 8 of HOOSIER HEALTH OFFICER ("Did Hurty Have a Medical Degree") in August 1939, he was not aware of the existence of the document, and neither was Hurty's family. Some of Dr. Hurty's critics also doubted its existence, claiming that he had only an honorary degree (from the Central College of Physicians and Surgeons). Dr. Rice presented evidence


THE MEDICAL COLLEGE OF INDIANA

John N. Hurty

Doctor of Medicine

that the degree was granted in 1891; however, even though all of Hurty's records and papers were searched thoroughly after his death in 1925, no diploma had actually been found.

Miss Louise Lingenfelter, Dr. Hurty's former secretary, on reading Dr. Rice's article in the *Bulletin* (of the Indiana State Board of Health) wrote that she remembered the diploma, that it was kept in a capped metal tube in his rolltop desk at the Board of Health. This tube, with its corroded closed lid, was located, opened, and the diploma found. It now is framed and hangs on the front wall of the Amphitheater.

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Vol. 72, No. 5
MAY 1979

USPS 284-440
ISSN 0019-6770

Editorial & Advertising Office:
3935 N. Meridian St.,
Indianapolis, Ind. 46208

EDITOR
Frank B. Ramsey, M.D.
MANAGING EDITOR
Martin T. Badger
BUSINESS MANAGER
Donald F. Foy

CONSULTING EDITORS
Charles A. Bonsett, M.D.
A. W. Cavins, M.D.
Samuel R. Mercer, M.D.
Lall G. Montgomery, M.D.
W. D. Snively, M.D.
I. W. Wilkens, M.D.

EDITORIAL BOARD
Elton Heaton, M.D.
Rodney A. Mannion, M.D.
(Terms expire Dec. 31, 1979)
Alvin J. Haley, M.D.
Wei-Ping Loh, M.D.
(Terms expire Dec. 31, 1980)
Steven C. Beering, M.D.
Paul S. Rhoads, M.D.
(Terms expire Dec. 31, 1981)

THE JOURNAL of the Indiana State Medical Association is published monthly in the interests of the medical profession of Indiana. No copyright claimed. Copyright rests solely with authors, who are responsible for statements made in their articles. Views expressed do not necessarily reflect the opinions of the editors. Scientific and editorial contributions are accepted for exclusive publication, subject to editorial requirements.

All issues since 1967 available on microfilm from University Microfilms, Inc., 300 N. Zeeb Rd., Ann Arbor, Mich. 48106. Indexed in Index Medicus and Hospital Literature Index.

Advertising rates and data available on request. Representative for national advertising: State Medical Journal Advertising Bureau, Inc., 711 South Blvd., Oak Park, Ill. 60302.

Publication deadline: 1st day of month preceding month of issue.

Subscriptions: $14 per year, USA; $16, Canada; $17, foreign; $12, libraries; $10, senior ISMA members; $8, members; except for special issues, single copies not available. Subscriptions renewable only in January and July.

Second-class postage paid at Indianapolis Ind. and additional mailing office.

SCIENTIFIC ARTICLES

339 Radiology of Pleural Disease—
Vernon A. Vix, M.D.
(17th Continuing Medical Education article)

346 The Five Fingers of Cardiology—
R. Joe Noble, M.D.

349 The Influence of a New, Improved Theophylline Assay Procedure on Laboratory Analyses—
Richard H. B. Sample

353 Evaluation and Management of the Newborn with Jaundice—
Eric Yancy, M.D.

360 Cigarette Smoking in Family Practice—
James R. Buechler, M.D.

362 Clinical Notes: Dermatology—
Jere D. Guin, M.D.

SPECIAL FEATURES

304 Editorials
320 Impertinent Pearls, or Arata's Rules
324 Tea: Symbol of Our Country?
336 Notes from The Royal College of Surgeons

DEPARTMENTS, MISCELLANEOUS

299 Medical Museum Notes
302 What's New?
318 Auxiliary Report
331 Future File
331 Calendar of Events
332 Cancer Corner
334 There's a Word for It
363 Book Reviews
365 CME Quiz
366 ISMA Membership Roll
367 News Notes
372 Obituaries



ABOUT THE COVER

Janet Guthrie was this year's first entrant for the 63rd Memorial Day 500 Mile Race at the Indianapolis Motor Speedway. The track opens May 5 with time trials scheduled for May 12-13 and May 19-20. The race will begin at 11 a.m., Sunday, May 27. (INDIANAPOLIS MOTOR SPEEDWAY OFFICIAL PHOTO)

STRATEGIC FINANCIAL PLANNING EXPANDS YOUR HORIZONS



Many health care professionals have discovered an excellent plan to create capital for a variety of uses.

Could you use $10,000 to $100,000+? Take your assets out of limbo and convert them into cash through our sale/leaseback program. Hempel Financial Corporation will buy your office equipment and lease it back to you for payments that are **100% tax-deductible**. Your bank relationships and lines of credit are not affected, and all transactions are strictly confidential. Hempel has virtually unlimited funds to meet the needs of physicians and dentists nationwide. For your free brochure describing our sale/leaseback program, as well as our other financial plans, **call toll-free (800) 421-7177; in California, call collect (213) 475-0304.**

HEMPEL
FINANCIAL CORPORATION
10880 Wilshire Blvd
Los Angeles, CA 90024

WHAT'S NEW?

International Sensor Technology has a solid state sensor for monitoring ethylene oxide vapors in air. It is designed for protection of personnel working in the vicinity of sterilizing operations by use of ethylene oxide. Both visual and audible alarms are activated if vapor levels exceed safe limits.

* * *

DIDRONEL® (etidronate disodium), which was introduced by Procter & Gamble in 1978 as oral therapy for treatment of symptomatic Paget's disease of bone, has just received FDA approval for use in the prevention and treatment of heterotopic ossification in spinal cord-injured patients. Formation of bone in soft tissue in patients during the first few months post-trauma may be reduced in incidence and in extent.

* * *

Apex Medical Supply is introducing several devices to improve accuracy of medicinal dosage. Due to the wide disparity in the capacity of household teaspoons, dosage may vary from less than half that intended by the doctor to almost twice. Apex has the Apex Super Dropper which draws up an accurately measured 5 cc. The Apex Medicine Spoon has a hollow handle with precise markings that indicate accurately amounts up to two teaspoonful or 10 cc. The Apex Oral Syringe measures up to 10 cc and any fraction thereof. It is for oral use only and cannot be fitted with a needle.

* * *

Merck Sharp & Dohme have a new hepatitis B immune globulin. "Hep-B-Gammagee" (Hepatitis B Immune Globulin Human, MSD) is recommended for short-term passive immunization following known or suspected exposure to hepatitis B virus, either parenterally through direct mucous membrane contact or by oral ingestion. The material will be especially suitable for medical personnel and laboratory technicians who routinely work with infected individuals and materials and so run a high risk of exposure.

* * *

Stuart Pharmaceuticals EFFERSYLLIUM® Instant Mix is now available in new 7-gram Convenience Pouch Packets. EFFERSYLLIUM® is a pleasant tasting, effervescent bulk laxative. It contains concentrated psyllium fiber.

* * *

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

IN BOOKS...

D. C. Heath and Company has released a book entitled "Television Violence and the Adolescent Boy." It is written by a Britisher, Dr. William A. Belson of North East London Polytechnic. It is based on a recent study of 1,500 boys ages 12 to 17. The general conclusion was, "The more violence a teenager sees on television, the more likely he is to be violent himself." 530 pages—$19.95.

* * *

Dell Ivy Books announce "The ABC's of Diabetic Cooking and Dining," which explains the problem of food choices and describes the exchange system. The book simplifies the various classes of foods that have been made more difficult by the confusing designation by label of "diet," "dietetic" and "diabetic." The book contains many recipes that do not require added sugar or artificial sweeteners. $1.95.

* * *

The University of Chicago Press releases a new edition of "The Courage to Fail; A Social View of Organ Transplants and Dialysis" by Renee C. Fox and Judith P. Swazey. It is available in paperback and has two completely new chapters on developments since 1974. The NEJM describes the book as "This book is a 'must' for every young physician and surgeon who is involved with the trial of new procedures in the environment of the modern teaching hospital." The paperback edition is priced at $6.95.

* * *

The Merriam Company is publishing a new handbook written for the administrative side of the modern medical office. "Webster's Medical Office Handbook" is the title. It is said to be the first single source of complete and authoritative information to which office staffers may refer. 608 pages—$10.95.

* * *

A Dell Ivy Book, "Emergency First-Aid Digest," has been released. It is thumb-indexed to aid in prompt reference use and covers most common injuries and illnesses with advice about the critical first minutes and the interval before the doctor arrives. $1.95.

* * *

Lexington Books has released "The Psychology of Pregnancy," a 160-page book by a University of Michigan psychologist, Dr. Judith W. Ballou. It is based on interviews with pregnant women and outlines and discusses the pregnant woman's changes in relationship with her own mother, with her husband, and with other family members, including the newborn. $14.95.

Six important reasons why physicians are selecting the Reality® Medical Management System.

1. Improved Cash Flow. Timely patient statements which reflect the detailed account status of charges, payments and aged account balances contributes to faster payments and a reduction of bad debts.

2. Totally Automated Insurance Processing. The **Reality** Medical Management System has incorporated the processing of Medicare, Medicade, Blue Cross, Blue Shield and most other third party payors into the automatic billing and insurance claim reporting function, thus, eliminating clerical time, errors and lost charges.

3. Direct Control. No reports, no files, no charge tickets leave your office. Your personnel, who know your method of operations, communicate directly to the computer based system via a video display terminal. Everything is processed according to your schedule and in a manner which fits your Doctor to Patient relationship.

4. Improved Practice Control. From the management reports and practice statistics, your practice can be managed in ways which will more effectively utilize the resources of the practice, thus, generating a better return on your total investment.

5. Better Patient Care. Research by diagnosis can lead to better patient care. The System maintains data by patient, by procedure and by diagnosis, whereby, retrieval and analysis can provide historical treatment histories. Better patient scheduling by the System makes for better patient relations.

6. Communication With The System In English. Unlike other automated systems, the **Reality** Medical Management System is under your direct control (not through a programmer) in a common language used by human beings — known best as **English**. If you can type, you can talk to the System.

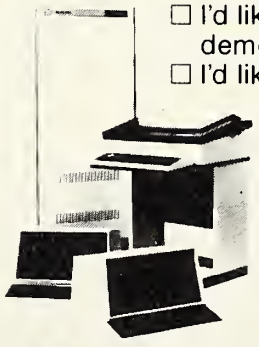
Take A Good Look At Reality. Call Anacomp or send in the coupon today for a free hands-on demonstration. Within 15 minutes you'll know all you need to know about choosing a computer.

Microdata

Attach your business card and send to:

Anacomp
4755 Kingsway Drive
Indianapolis, Indiana 46205

For immediate response, call **317/257-1426**



Show me.

☐ I'd like a free hands-on demonstration of Reality®.
☐ I'd like more information.

EDITORIALS

Will the REAL Inflation Culprit Please Stand Up?

Twenty-five per cent of hospital costs are due to government regulations.

The Hospital Association of New York State, after an exhaustive study, reports that it is government, mostly federal and state but also other levels, that is the direct cause of one-fourth of hospital costs. There are 164 regulatory bodies in New York State alone.

In New York about $38.85 is spent each day for each hospital patient in meeting regulatory requirements.

More than 50 per cent of the operative budget of each of four hospital departments—administration, personnel, social service and utilization review—is devoted to government-ordered regulations.

Registered nurses are usually thought of and actually should be practically 100% devoted to patient care. R.N.s spend 25% of their time on duty dealing with government reports.

The cost of new hospital red tape is estimated to be 4% more each year.

These observations are, for the most part, direct quotations from an article, "How Government Inflates Your Hospital Costs," by John D. Lofton, Jr., in the February issue of CONSERVATIVE DIGEST.

Mr. Lofton quotes the Hospital Association as acknowledging that some government regulation is necessary and productive. However, there is obviously too much of it and it is largely duplicative, contradictory and nonproductive.

Certainly when as much as $38 is spent by every hospital patient every day for government reports and compliances, it doesn't seem right to have the government complain of high hospital costs. After all, the cost of medical care, while high, has not gone up as fast as has the cost of the postal service, the cost of Social Security, and the general cost of government.

Save Us from the Experts!

Modification of the high cost of hospitalization is a difficult and complex undertaking. Part of the complexity, and perhaps the most of it, has been due to a faulty assessment of the underlying causes. Everyone and every organization addressing the problem has done so with a built-in bias. All the experts blame the problem on the other experts.

Government "experts" have been the most vocal. They talk a lot about how dissatisfied people are. They not only do most of the talking but they also assign the dissatisfaction to the wrong gang. The customers—the American people—do not sound dissatisfied with medical care or with the cost, admittedly high. Government speaks of "rebellion against hospital costs" when there is no sign of rebellion.

The government is biased. In most states the governmental reports and the work required to comply with governmental regulations add an astonishing amount to the daily patient rate. Hospital rates would be considerably lower if government—city, county,

CONTINUED ON PAGE 306

THE INDIANA STATE MEDICAL ASSOCIATION

3935 N. Meridian, Indianapolis 46208—Telephone 925-7545

1979 Annual Meeting—Oct. 13-17—Indianapolis

OFFICERS FOR 1978-79

President—Arvine G. Papplewell, 3530 S. Keystane, Indianapolis 46227

Treasurer—Joseph F. Ferrara, 111 S. Water St., Franklin 46131

Assistant Treasurer—Douglas H. White, 3524 N. Meridian, Indianapolis 46208

Executive Committee—Paul W. Haltzman, Chairman; Arvine G. Papplewell, Joseph F. Ferrara, Douglas H. White, John W. Beeler, Eli Gaadman, Alvin J. Haley, Martin J. O'Neill, Members

Speaker of the House—Lloyd L. Hill, 302 N. Duke St., Peru

Vice Speaker—Lawrence E. Allen, 2009 Brawn St., Anderson

Executive Director—Mr. Donald F. Fay

TRUSTEES

District	Term Expires
1—John A. Bizal, Evansville	Oct. 1980
2—Harald M. Manifold, Bloomingtan	Oct. 1981
3—Thomas A. Neathamer, Jeffersanville	Oct. 1979
4—Haward C. Jackson, Madison	Oct. 1980
5—Paul Siebenmorgen, Terre Haute	Oct. 1981
6—Davis W. Ellis, Rushville	Oct. 1979
7—Donald C. McCallum, Indianapolis	Oct. 1980
7—John G. Pantzer, Indianapolis	Oct. 1981
8—Jack M. Walker, Muncie	Oct. 1981
9—John A. Knote, Lafayette	Oct. 1979
10—Martin J. O'Neill, Valparaiso	Oct. 1980
11—Herbert C. Khalouf, Marion	Oct. 1981
12—Alvin J. Haley, Fart Wayne (Chairman)	Oct. 1979
13—Donald S. Chamberlain, Sauth Bend	Oct. 1980

ALTERNATES

District	Term Expire
1—E. DeVerre Gaurieux, Evansville	Oct. 197
2—Edgar R. Cantwell, Vincennes	Oct. 198
3—Richard G. Huber, Bedford	Oct. 198
4—Mark M. Bevers, Seymour	Oct. 197
5—William G. Bannon, Terre Haute	Oct. 197
6—Dan W. Hibner, Richmond	Oct. 198
7—I. E. Michael, Indianapolis	Oct. 197
7—Gerald J. Kurlander, Indianapolis	Oct. 197
8—Ted S. Doles, Middletown	Oct. 197
9—Max N. Hoffman, Covington	Oct. 198
10—Leonard W. Neal, Munster	Oct. 198
11—Fred C. Poehler, La Fontaine	Oct. 198
12—Franklin A. Bryan, Fart Wayne	Oct. 198
13—John W. Luce, Michigan City	Oct. 197

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- **One full year in-hospital care**
- **100% semi-private room and hospital extras**
- **Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy**
- **$250,000 Major Medical Benefits**

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Paul Biltimier, Senior Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4241.

We believe in being better

Blue Cross Blue Shield
of Indiana

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark. Nat'l Assn. of Blue Shield Plans

EDITORIALS

Save Us from the Experts!

CONTINUED FROM PAGE 304

state and federal—would cancel all the regulations that do not accomplish any good in the first place.

The federal government also imposes a pay scale that rises periodically and which obliges hospitals to spend more and more for most of the labor force. The minimum wage scale forces the payroll through the ceiling. Since most hospitals spend between 65% and 75% of their income for wages and salaries, the medical cost inflationary spiral is boosted by Congress on a regular schedule.

John Y. James, president of Hospital Planning Associates of San Francisco, is doubtful that the present government actions will be effective enough to produce any real advantage. Frugality, he says, has reduced daily costs from $8 to $10. He agrees that frugality should continue but, in spite of this type of cost containment, he predicts that hospital costs will continue to rise, possibly to $715 in 1984 and $1250 in 1988.

Mr. James thinks everyone is missing the real saving factor. Group-practice-prepayment plans from all parts of the country are utilizing hospitals at about half the rate the remainder of the medical care system does.

Group-practice-prepayment plans have almost the same per diem costs as other practices but only half the admission rates. Therefore, the prepayment plans have half the hospital costs.

Furthermore, Mr. James points out that physicians are the "gatekeepers." They have control of admissions and can and should utilize hospital facilities in a more economical way.

This advice is, of course, much easier to hand out than it is to follow. However, whether control of hospital admissions to the point of halving admissions is difficult or next to impossible does not mean that the advice is defective. If prepayment plans use their hospitals on a distinctly less open-handed style and continue to render medical service with which most patients are satisfied, then there is no apparent reason that the rest of the medical care world cannot do the same.

Universal use of hospitals at the same rate as is customary with the prepayment crowd would most certainly be kind to the pocketbook and, in addition, would provide protection from the government "experts."

Editorial Notes . . .

It seems that an epidemic of common sense has been released by Blue Cross/Blue Shield. Naturally, the Blues cannot and do not attempt to tell physicians how to practice. However, they can and have ruled that there are procedures for which they will not pay. That is, unless the procedures are specifically indicated and are documented in each case by the attending physician. The list includes many laboratory tests that have been considered as necessary for every patient admitted to a hospital. There are also lists of operative procedures that will not be compensated for unless the indications are carefully spelled out. The ruling has two advantages—one is the saving of money and the other relates to the fact that diagnostic work done routinely without regard to specific indication sometimes tends to become hum-drum and may be done with less than the optimum care and concern.

The American Board of Emergency Medicine is the latest certifying body to be approved by the American Board of Medical Specialties. Complete approval depends on a formal vote by the ABMS at its next meeting in September. The endeavor leading to recognition as a specialty has been one of the important programs of the American College of Emergency Medicine since its organization in 1968. Factors such as the great motility of Americans, the development of more and more work on a three-shift basis, the origination of residency training in emergency care, and the remarkable increase in physicians in this field have stimulated the formation of emergency room service in many hospitals to the point that Americans made 78 million visits to emergency facilities last year. Emergency medicine has developed a definite body of knowledge and technique and is therefore prepared to function as a specialty and to certify its physicians in regard to training and talent.

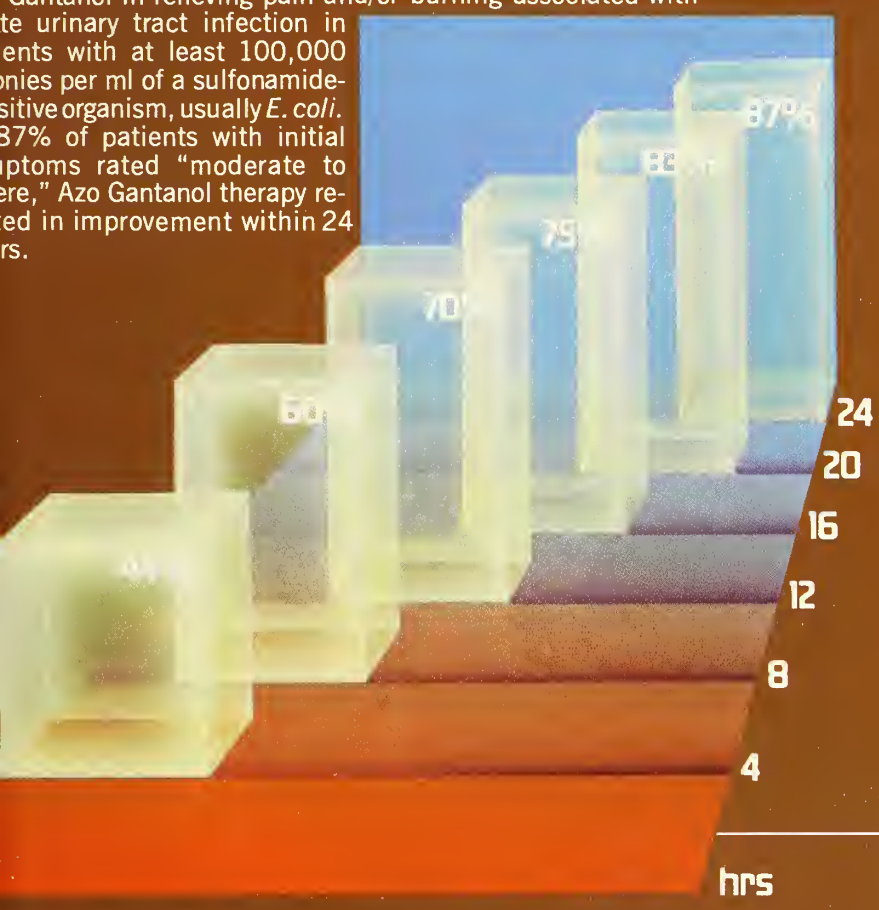
The Alabama State Health Planning and Development Agency has approved the plan of the Statewide Health Coordinating Council (SHCC) to base hospital bed needs on utilization and population instead of the rigid four beds per 1,000 population rule.

A recent FDA audit of the controversial University Group Diabetes Program (UGDP) study of the cardiovascular complications of diabetes when treated by placebos, tolbutamide and by insulin is itself being challenged since it only validated data transfer in the UGDP coordinating center. It was not an analysis of the study. Those who are critical of the UGDP study emphasize that the study did not consider risk factors at entry, did not properly classify causes of death, and did not properly vary treatment when variances were indicated. The FDA is now being petitioned to modify and correct the findings of the study in view of the many faults in choice of patients and in conduct of treatment. And also in view of the several properly conducted similar clinical studies here and in Europe, all of which have reached conclusions entirely opposite to the ragtag UGDP fiasco.

portant data on the pain of acute cystitis:

n 87% of patients tudied [303 of 349], lzo Gantanol® reduced ain and/or burning vithin 24 hours*

ontrolled, multicenter study assessed the efficacy of Gantanol in relieving pain and/or burning associated with te urinary tract infection in ents with at least 100,000 nies per ml of a sulfonamide-sitive organism, usually *E. coli*. 87% of patients with initial ptoms rated "moderate to ere," Azo Gantanol therapy re-ed in improvement within 24 rs.



st pain relief plus effective antibacterial action

Azo Gantanol®

tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

r for
e pain the pathogens

on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



A reminder

ZYLOPRIM®
(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim® (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

CONTRAINDICATIONS: Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.

WARNINGS: ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy. particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol® (mercaptopurine) or Imuran® (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

Usage in Pregnancy and Women of Childbearing Age: Zyloprim® (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

PRECAUTIONS: Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or subnormal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

ADVERSE REACTIONS:

Dermatologic: Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.
Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.
A few cases of alopecia with and without accompanying dermatitis have been reported.
In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

Gastrointestinal: Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

Vascular: There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

Hematopoietic: Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim® (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

Neurologic. There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

Ophthalmic: There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

Drug Idiosyncrasy: Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

OVERDOSAGE: Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

HOW SUPPLIED: 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709



Does it influence your choice of a peripheral/cerebral vasodilator*?

- Vasodilan—compatible with coexisting diseases
- Vasodilan—compatible with concomitant therapy
- Vasodilan—compatible with your total regimen for vascular insufficiency

***Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily.
Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.
Parenteral administration is not recommended in the presence of hypotension or tachycardia.
Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.
Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.
Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

U.S. Pat. No. 3,056,836

VASODILAN®
(ISOXSUPRINE HCl)
20-mg tablets

Mead Johnson PHARMACEUTICAL DIVISION

© 1978 MEAD JOHNSON & COMPANY · EVANSVILLE, INDIANA 47721 U.S.A. MJL7-4268

When painful spasm is the presenting symptom...



in the functional bowel/irritable bowel syndrome*

Bentyl®

(dicyclomine hydrochloride USP)

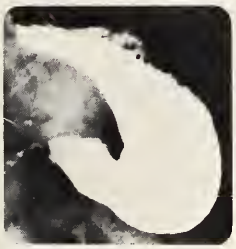
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

8-4420 (Y736A) MNR-804

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention, blurred vision and tachycardia, palpitations, mydriasis, cycloplegia; increased ocular tension; loss of taste, headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation, constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg. *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Court Action

Physician's Conduct 'Outrageous'

A physician's misconduct in allegedly intimidating two expert witnesses who testified against him in a malpractice suit warranted a new trial against him after he was found not negligent in the suit, a Maryland appellate court ruled.

A patient filed suit against his physician for negligence in performing back surgery. He claimed that he suffered sexual impotency and lack of bowel and bladder control after the operation.

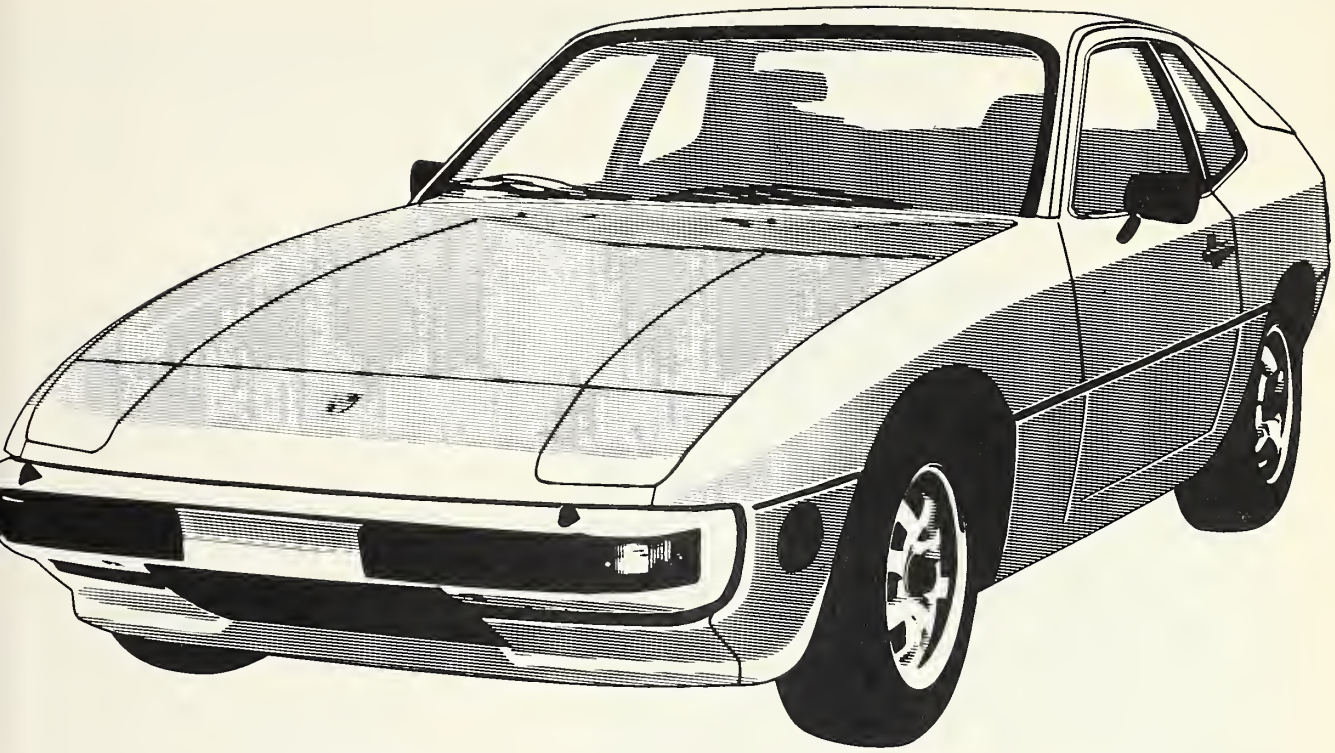
During the trial the physician allegedly contacted through other physicians the two expert witnesses who later testified against him at the trial. He allegedly informed them that their testimony would be transcribed and disseminated to their local medical societies. To one of them the physician allegedly suggested that testifying might not be a particularly good idea since the oral portion of the expert's board certification examinations were to be held in the near future.

The trial court instructed the jury that evidence of the physician's tampering with the witnesses was admissible only for the purpose of raising an inference that the witnesses testimony would be unfavorable to him. The jury returned a verdict in favor of the physician, and the patient appealed.

Reversing the lower court's verdict, the appellate court said that the physician's conduct was outrageous. In both cases the physician contacted physicians who were mentors of and highly respected by the testifying physicians. Both physicians testified that the conversations with their former mentors had significant effects on their testimony.

The appellate court said that the evidence concerning the physician's tampering with the witnesses should have been introduced as directly bearing on the physician's negligence. The evidence could be used as direct evidence of the physician's conscious realization of the weakness of his case, the court concluded.—*Meyer v. McDonnell,* 392 A.2d1129(Md. Ct. of Special App., Nov. 2, 1978)

Courtesy of THE CITATION, Feb. 15, 1979.



Why lease an ordinary car when you can lease a Porsche 924?

The Porsche 924 can reach 60 mph in slightly over 11 seconds from a standing start, without breathing hard. Not that you'll ever need that kind of performance muscle, but it's nice to know that it's there.

Now you can lease a Porsche sports car for the 1980s today. For rates comparable to those of other cars with fatter dimensions. And thinner bloodlines. With all the options you'll ever want, including a snug-fitting removable sun roof.

If you're looking for an astonishingly well-engineered sports car that is the result of continuous testing and refinement, Porsche is for you. And if you think sports cars are lacking in luxury, one test-drive in a Porsche 924 will change your mind.

Don't lease a car. Lease a new Porsche 924. And give yourself a whole new lease on driving.

PORSCHE+AUDI

NOTHING EVEN COMES CLOSE

See your nearby Porsche Audi dealer.
Ask about the special low rates in effect until May 31, 1979

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
1128 - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

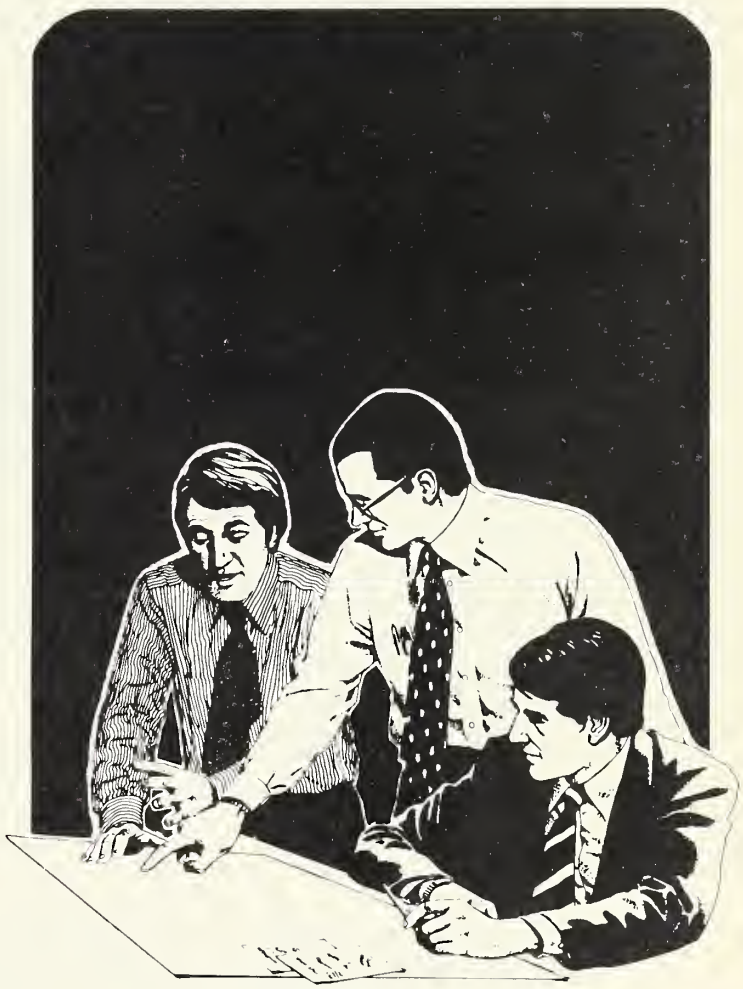
4201 West Victoria Street · Chicago, Illinois 60646

An American Company

Management Problems?
Your CPA can help.

A Certified Public Accountant can provide specialized advice and service in many areas: internal cash controls, billing and collection procedures, analysis of expenditures, budgeting and income forecasting, plus numerous other business considerations.

As a professional who gives advice, you know the value of seeking professional advice. Consult a CPA for solutions to many of your practice's management problems.



Certified Public Accountants
perform the full range of accounting services

CPA
More than a title, it's a profession

Indiana Association of Certified Public Accountants, Inc.
921 E. 86th Street, Suite 102, Indianapolis, Indiana 46240, 317-257-6284

The Maker

Examining a Few Myths About Prescribing.



Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand–name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.

FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were not bioequivalent to a reference product. As y know, there is substant literature on this subje affecting many drugs, i cluding such antibiotic as tetracycline and ery- thromycin. The record drug recalls and court actions affirms strongl that there are differenc among pharmaceutica companies and their products. Research-intensive companies have far better records than those that do no r search and may practi minimum quality assu ance.

MYTH: Industry favors only "expensive" brand names and denigrates al generics.

FACT: PMA companies make 90 to 95 percent the drug supply, includ ing, therefore, most of generics. Drug nomen- clature is not the impo tant point; it's the comp tence of the manufac- turer and the integrity the product that count

Matters.

MYTH: Generic options almost always exist.

FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.

FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

MYTH: Drugs account for a major portion of the rise in health care costs.

FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

MYTH: Government intrusions into the marketplace will save tax money.

FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal "help," such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

PMA

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005



AUXILIARY REPORT

Charlotte (Mrs. Abner P.) Bennett
President, ISMA Auxiliary

The concern of "people for people"—medical spouses working together for the good of their communities—aptly describes the ISMA Auxiliary. The most successful auxilians are those who see the tangible results of their programs. So again this year let's continue our efforts to expand the immunization program in close cooperation with state and county medical associations. Let's continue to stress CPR in our schools and communities, show support for medical legislation by responding quickly to a "Legs Alert," contribute to AMA-ERF and continue to help our physician mates by working for better health care and better health education.

But to be successful in these efforts, we must concentrate on membership. We must recruit the unaffiliated physician's spouse, retain the auxilians we have and retrieve our former members. Members are the life blood of our Auxiliary. We urge every ISMA member whose mate is unaffiliated to help us by starting in his own home. The untapped talent and energy of these potential auxilians will be an invaluable asset to our organization. However, we can only benefit from their abilities if we have access to them.

New avenues of involvement are constantly surfacing, so there are a variety of interesting programs from which to choose. Our national president, Mrs. Manuel Bergnes, has stressed improving the quality of living. One of her concerns is the establishment of hospices for the terminally ill so the "quality of life" as well as the "length of life" can be improved. Our population is an aging one.

It would be beneficial to investigate programs that will help the aged live in their own homes and help families adjust to, and care for, aging family members who must live with them. We need geriatric technician training programs, for example, to help alleviate this problem.

The Auxiliary also has a role to play relative to the needs of the spouses of medical students and residents. We have much to offer each other.

These are just a few of the activities open to us. The Project Bank Catalog has listings of many more.

At last month's meeting in Goshen of the House of Delegates, a group of energetic and dedicated women were elected to office in the ISMA Auxiliary for 1979-1980. They are:
President—Mrs. Abner P. Bennett (Charlotte), Evansville; **President-elect**—Mrs. Herbert A. Schiller (Dorothy), South Bend; **First Vice President**—Mrs. Glenn W. Irwin (Marianna), Indianapolis; **Northern Area Vice President**—Mrs. James E. Benson (Carol), Elkhart; **Central Area Vice President**—Mrs. Robert E. Wrenn (Anne), Bloomington; **Southern Area Vice President**—Mrs. James A. Koontz (Judy), Vincennes; **Recording Secretary**—Mrs. Richard B. Schnute (Mary), Indianapolis; **Treasurer** — Mrs. Robert M. Schleinkofer (Karen), Fort Wayne.

With the assistance of this capable executive committee and the other talented members of the board, the Auxiliary looks forward to providing guidance to the county auxiliaries and to members at large.

A recent AMA Leadership Conference stressed the importance of a working relationship between the Auxiliary and the medical association. Our organization has enjoyed just such a relationship and appreciates everything the ISMA has done to help us. We, in turn, will continue to offer our support to the ISMA in its program for the advancement of medicine and the improvement of public health.

1979-1980 promises to be an exciting and rewarding year.

THE ISMA AUXILIARY:

'We Can Do More Together'

See

THE JOURNAL

April 1979

Some of the things we'll give her you can't pay for.



Self-respect, for one thing. And warmth. Companionship. Motivation.

These are things you can't buy for someone.

But everyone who comes to Americana finds them. Free.

Because Americana is more than you expect. It's not just a health care center. It's almost a substitute home. And the people who work here aren't just skilled in their professions. They're skilled in humanity, too.

The result is a place that's made for people.

When someone you love needs nursing care, let it be nursing care with love in it.

Let it be Americana.

Call us. Come see us.

Americana Healthcare Center

1345 N. Madison Ave. / Anderson, IN 46011 / (317) 644-2888
343 S. Nappanee St. / Elkhart, IN 46514 / (219) 293-2544
5600 E. 16th St. / Indianapolis, IN 46218 / (317) 356-0911
2010 N. Capitol Ave. / Indianapolis, IN 46202 / (317) 924-5821
8350 Naab Rd. / Indianapolis, IN 46260 / (317) 297-4111
3518 S. Lafountain St. / Kokomo, IN 46901 / (317) 453-4666
2201 Cason St. / Lafayette, IN 47904 / (317) 447-4102

OPEN VISITING HOURS • APPROVED FOR MEDICARE
Accredited by the Joint Commission on Accreditation of Hospitals

Qualified patients with Blue Cross or other major insurance company benefits accepted.

Americana—The nursing care for people who care about quality.

Impertinent Pearls, or Arata's Rules

A collection of barbs designed to dispel any notion that doctors are perfect . . .

L. A. ARATA, M.D.
Shelbyville

IN THE DIM, dark and distant past when I was in training, we students and interns paid attention to pick up the *pearls* of medical wisdom dropped by our teachers. Now, after these years of treating patients, I cast forth this assortment of *impertinent pearls* for anyone who wishes to grasp them and use them:

1. The severity of the illness claimed by the patient varies inversely with the histrionics of the patient. One must, of course, keep in mind that the neurotic and crock patient will eventually die. The best reminder is the epitaph of the neurotic: I told you I was sick.

2. Admire the difficult patient because of his great internal strength. No matter how great a pain in the neck he is, or how sharp a thorn he is in our side, there is someone at his home or in his past who is crazier and more difficult than he. Where else did he learn to be such an S.O.B.? Our patient has lived and carried on under circumstances and burdens greater than those he inflicts upon us.

3. Never expect anyone to be very good at what he does to earn his living. Examples: Most school children are not very good students; most cooks are not very good cooks; most typists are not very good typists; most auto mechanics are not very good mechanics; and so on, *ad nauseam*. So, always expect the worst and you will occasionally be thrilled when your expectations are not met. If you expect the best, you are headed for frequent disappointments. Is this important in the etiology of peptic ulcer disease? Please advise, if you have the answer to that one.

4. God bless the patient who says, "Thank you, doctor," for he is the one who pays his bills. He may not be prompt, but he is the one who supplies the doctor with the money for his Cadillac and with the money for his wife's fur coats.

5. Beware of the patient who tells you what a great doctor you are. It is music to your ears, but such music contributes nothing toward the next income tax installment. When his bill becomes large enough to refer it to the collection agency, this patient promptly starts singing his siren song to the next doctor on his list. But it certainly was sweet music to hear while it lasted, wasn't it?

6. The severity of the emergency present in the hospital Emergency Room is inversely proportional to the cube of the number of relatives and friends waiting outside the E.R. to hear the horrible news. Expressed in mathematical symbols, one might say:

$$S = \frac{1}{N^3}$$

Where S = the severity of the situation, And N^3 = the number of companions of the sick-injured patient—raised to the third power. The patient brought in by emergency ambulance with no one to identify him is probably in much worse condition than the hyperventilator who has taken the time to impress and terrify

his family, friends and neighbors with his symptoms prior to his departure for the Emergency Room.

7. Beware and shun the patient whose night, week-end or holiday phone calls start with, "I hate to bother you at this time, but . . ." This patient is too considerate of the "real doctors" (specialists) to call them, so he tries to get free medical advice from the G.P. or family doctor by using this ploy. Besides, he has learned that the specialist answering service does not dispense medical advice. Probably the best solution to this problem is to offer the inconsiderate person medical examination or treatment at the hospital Emergency Room after warning him that the fees will be extremely high, payable C.O.D., and that his insurance won't cover the charges. Hopefully, his next call will go to a colleague!

The patient who pays his bills is your source of Cadillacs and fur coats.

Tell the pesky patient your fees are high, payable C.O.D., and not covered by insurance.

8. Be cautious in doing business with a man of small physical stature. The same rule also seems to apply to dogs. Just as a small-sized dog is more likely than a large dog to have a nasty disposition and to bite one's heels, so a small-sized man is more likely than a large man to be difficult to do business with and more likely to take advantage of you. I speculate that malpractice suit statistics would bear out this law. Oh, if only some Santa Claus would endow me with sufficient funds to take the time to research this point!

9. Never feel bad when a patient changes doctors, or when you lose a patient to another doctor. As long as patients are doing well on our services, they do not want to go to someone else. It is when they are not doing as well as they expect to, or are otherwise dissatisfied with us that they migrate elsewhere. If they do better on the other doctor's service, let us rejoice with them, for is not our vocation the helping or improving of patients? If they do not improve under the new doctor's care, they will return—blessing us for the super abilities that we knew we possessed all along. Furthermore, everytime I lose a patient, I gain X dollars worth of time to goof off—or to cogitate on additional impertinent pearls.

Losing a patient allows you more time to goof off.

Care for growing children—they will be the worrying parents of tomorrow.

10. This is my law of one-thirds: One-third of the people do two-thirds of the work; one-third of the people do one-third of the work; one-third of the people do nothing. You can observe this phenomenon in the hospital business office, in the housekeeping department, or in any other field of human activity. It seems to apply to all situations, including children in the classroom, money earning, money spending, adultery, whiskey drinking, car buying, nagging wives, cheating, lying, donations to your church, etc. The true value of this pearl is probably what it cost you. I leave its worth to you, but I find it an interesting observation.

11. This valuable law advises you of the profound observation that there are more patients than there are doctors. Since it is our privilege to care for patients, it is a more important privilege that we care for doctors. This includes self care as well as the best of care of our professional brethren, including their loved ones. After all, a dead doctor is of no value to patients and to himself, and of little value to anyone else.

12. Doctor, if you feel compelled to treat yourself in any illness, for your own sake, as well as for the sake of the doctor whose patient you will become, limit your treatment to placebos! At best, doctors are the most difficult patients to treat. Now, what is more tedious to treat than a doctor who has dosed himself with inappropriate medications, in the wrong dosage amounts, for inappropriate time spans—then presents himself to a professional brother to take over and diagnose and treat an illness so beclouded with pharmaceutical chop suey! Please be kind and thoughtful of the other doctor by limiting yourself to placebos!

13. In the hospital dining room, never answer the phone: Some other idiot will do it. It is never ringing for the doctor who might be tempted to answer it; it is always for someone whom the doctor does not know or cannot see; answering it puts the "monkey on the doctor's back." Besides, there is always someone else present who has an obsession not to let the phone ring forever.

Attend staff meetings—a good way to vote your enemies into office.

Don't say "Oops!" Avoid malpractice suits—say "There!"

14. Always attend the hospital medical staff meeting when the officers for the next year are elected. You may miss as many meetings each year as your staff bylaws permit, but do not miss this one. Attendance at this one meeting is the best defense one has against getting elected —with the necessity of wasting hours of time during the next year attending executive committee meetings and doing other staff work for which you are ill-trained and even less capable. Be present to help vote your worst enemies into office.

15. Whenever I find myself voting with the majority on any issue, whether National political or as a member of any medical group or hospital staff, I have learned to re-examine my position very carefully—because I am usually siding with the wrong faction. I have observed that, in most situations, the majority position is usually wrong. Sometimes it takes tincture of time to demonstrate the error of the majority position, but just wait and see. Of course, such a position does not lead to victory in popularity contests—but who, besides politicians and beautiful girls, needs to score in popularity contests? There is a real bonus to taking this stand: After passage of appropriate time, one is given credit for possessing Wisdom, and enjoys such status long after the politician is forgotten, and the beautiful girl has grown fat, flatulent, and forty. Besides, I was denied the birthright of ever being a beautiful girl by the accident of having been born a male.

16. Never say "OOPS!" Say "THERE!" This law is of particular value to surgeons, but is needed everywhere in medicine. Failure to observe this rule with religious fanataticism has probably triggered innumerable malpractice suits. To become adept at this rule, one should practice it daily. If one is as old as I am and therefore shaves daily, the shaving period provides opportunity to cultivate the habit.

17. Make friends with the children in your practice, for they will become your dedicated patients much quicker than you realize. Their parents will grow older and become your geriatics; their grandparents will be lost to your service by death; so a growing number of growing children will keep your practice active enough to keep you driving Cadillacs and worrying about the Dow-Jones Average. Besides all that, it is soul-satisfying to see the little ones grow up to become the worrying parents of that next generation.

18. Treat the hospital nurses with the same kind, friendly, thoughtful courtesy with which you would wish your colleagues to treat them —if those nurses were your sisters or daughters. It will be to your advantage and to your patients' advantage, because these dedicated nurses will shower kindness and TLC on your patients. Your patients will get better care and enjoy quicker and better recoveries for the increased loving care they receive. That makes your image as a great doctor shine even more brilliantly! In addition, if you need more patients, those same nurses will spread the gospel of your greatness and ability among their friends and neighbors. It will help your practice to grow.

19. I still practice our old custom of professional courtesy. One excellent reason for doing so is the Internal Revenue Service. If I render one hundred dollars' worth of service to a colleague, he must do three hundred dollars' worth of work. His overhead will cut his net to two; the IRS will take one of that; I'll get the last hundred. Then, I must split that 50-50 with the IRS. The net result is fifty for me and one hundred fifty to the IRS. Thanks, but no thanks. I am not that great of an IRS fan.

Finally, which doctor can't add a few worthwhile pearls to my collection? It has been fun to assemble these; I urge other doctors to add to the assortment.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D., R. Witherington, M.D., I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

TEA: Symbol of Our Country?

JESSIE M. STEVENSON
Indianapolis

THE BOSTON TEA PARTY may account for coffee's role as our national beverage rather than tea. Even so, it is estimated that presently Americans drink more tea than any other nation, with the exception of Great Britain and China. Tea is the world's most economical beverage, after water.

Tea is said to have been in existence for almost 5,000 years. It has been used as a medicine, a food, a beverage, as the chief factor in religious ceremonies and as money (in compressed brick form).

Historians cite 350 A.D. as the earliest authentic record of tea cultivation. At the beginning of the 6th Century its usage changed from a purely medicinal drink to that of a pleasing beverage.

There are many legends concerning the discovery of tea. One of the most plausible seems to be the following: About 2700 B.C. the Chinese Emperor, Shen Nung, was walking in his garden when he detected a very pleasant and unusual aroma. He discovered that some tea leaves had fallen into a pot of hot water, which his servant had prepared. He tasted the colored water, liked it, and tea was discovered.

Thus, the West is indebted to the East for the discovery of tea since it was first used in China. From there it spread to Japan and was later introduced into Europe from China. It was sold at Thomas Garway's Coffee House in London in 1657. In 1660, Garway wrote of the virtues of tea. He said: "The drink is declared to be the most wholesome, preserving in perfect health to extreme old age."

A tea enthusiast, Sidney Smith, said: "Thank God for tea! What would the world do without tea! How did it exist! I am glad that I was not born before tea!" The exact date of its introduction to the American Colonies is not known but it was not popular in the West before 1700.

When tea was first sold in England it cost the equivalent of $35-$50 a pound. It was the property of the aristocrats. When it became available to the middle class and even to the poor, it became a "social outrage, a fallen idol, a regenade status symbol."

Arthur Gray, in his LITTLE TEA BOOK, said that tea is "the cup that cheers but does not inebriate." He further said that he never put milk in tea or coffee. He said if he did he became as "sick as a defeated President for the candidacy."

Officials of the Tea Council of the United States have pointed out that tea is divided into three classes: fermented or black (which accounts for 97% of the tea used in this coun-

The author, 78, is a resident of Speedway. In December 1977 she was elected to the Speedway Hall of Fame in the Religious and Educational category. She organized the Speedway Chapter of the American Association of Retired Persons in 1970.

ry); green or unfermented tea (the type usually served in Chinese and Japanese restaurants); and semi-fermented or oolong tea.

TREDICASTS (a base book) reported that in 1976 181.3 million pounds of tea was imported.

About 60% of all tea consumed in the United States is iced tea. This form of tea was invented by Richard Blechynden, a tea merchant at the 1904 World's Fair in St. Louis. He was promoting Indian and Ceylon tea. He was having difficulty selling hot tea during a heat wave. He put some ice into it, making iced tea.

In 1908 Thomas Sullivan, a New York tea merchant, began sending out small samples of tea to restaurants in little silk bags. He began to get orders from the restaurants for the little bags in which they could put *their own* tea. Thus, the little tea bag came into existence.

Instant tea became a reality in 1956 when cold water soluble products were developed. Canned iced tea is the latest innovation of American tea drinkers. Tea manufacturers are considering a freeze-dried instant tea and carbonated canned iced tea.

The volatile oils in tea are responsible for the flavor. The stimulating effects are from caffeine and the astringency qualities are from tannin. Tea and toast are recommended during bouts with diarrhea because tannin tends to induce constipation.

Tea has had its share of medical pros and cons.

In a medical and cook-book of the 1880s, a Dr. Chase said: "We are driven to the conclusion that no person can use the smallest quantity of tea or coffee, or in fact, any drink but pure water, without more or less damaging the action of the stomach and liver and ultimately through the nerves and brain of the whole system. Nay, we are driven to a position stronger still, which is, that no person can take these poisons at all without in a greater or lesser degree, abridging human happiness and human life."

On the other hand, Dr. Cornelius Decker, known as "Dr. Bonteko" (meaning good tea), recommended large doses of tea for fever. He said: "It must be a considerable and obstinate fever that cannot be cured by drinking every day 40 to 50 cups of tea, about 20 of which are strong and bitter." He also said, "Tea removes fatigue, superfulous sleep, encourages long profitable hours with friends or books, instead of lying like a corpse on a bed."

In his "Observations Medicae" Dr. Nikalos Dirx (who wrote under the pseudonym Tulip) said: "Nothing is comparable to this plant. Those who use it are, for that reason alone, exempt from all maladies and reach an extreme old age. It preserves them from gallstones, headaches, opthalomia, colds, catarrah, asthma, sluggishness of the stomach and intestinal troubles."

In 1970 an article appeared in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION warning against the indiscriminate use of tea, by people with heart ailments. Arrhythmias are known, the article stated, to be related to coffee and tea (particularly ventricular premature contraction).

John F. Flynn, M.D. of New York pointed out that tea and coffee and sometimes cola drinks are consumed by patients of a coronary care unit, even though the medical and nursing staffs' efforts are directed to the observation and control of arrhythmias.

Even though tea as commonly brewed contains only about half as much caffeine as coffee, an article in THE HEALTH LETTER states that if a person has a peptic ulcer, serious heart disease, a persistent fast resting heart rate, just plain burning in the pit of the stomach, or nervousness, he should avoid, or at least sharply limit caffeine-containing drinks. THE HEALTH LETTER further states that healthy people can usually tolerate these drinks in moderation. "But if a person uses them he should learn to think of them as a hidden source of drugs and treat them with the respect they deserve."

After the Boston Tea Party, tea, which had been the favorite American drink, became the "hated symbol of oppression." It was said that the mark of an American patriot was to refuse to drink tea.

Tea was and still is, the symbol of England. Even so, it caused that country to lose the valuable American Colonies, a fact which changed the course of history. Thus, as Americans, we also might do well to consider tea as the symbol of our country in that it proved to be the catalyst in the birth of our nation.



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique that we have over $4,000,000.00 in personal loans made to Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Colin G. Haza
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis Morris Plan

Tenuate® Ⓒ
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.
PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
ADVERSE REACTIONS: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

Whether overweight is a complicating factor... or just uncomplicated overweight.

Tenuate® Dospan® ℃ (diethylpropion hydrochloride NF)

75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

Merrell

For prescribing information see opposite page.

new
600 mg tablets
Motrin®
ibuprofen, Upjohn



More convenient for some of your patients.

Now there are three Motrin tablet strengths to choose from–
600 mg, 400 mg, and 300 mg

Upjohn The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A.

© 1979 The Upjohn Company

Ap

In Edema* or Hypertension* when potassium balance is a concern...

Potassium-Sparing

DYAZIDE®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Makes Sense

In Edema

The triamterene in 'Dyazide' limits potassium loss and provides an additive diuretic effect to that of the hydrochlorothiazide component.

In Hypertension

As the hydrochlorothiazide in 'Dyazide' lowers blood pressure, the triamterene component limits potassium loss.

Serum K^+ and BUN should be checked periodically

particularly in the elderly, diabetics, and those with suspected or confirmed renal insufficiency (see Warnings). If hyperkalemia develops, substitute a thiazide alone.



Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:

* **WARNING**
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in postsympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

SK&F CO.
a SmithKline company

SK&F CO.
Carolina, P.R. 00630



EMPIRIN® COMPOUND
with CODEINE

Each tablet contains aspirin, 227 mg; phenacetin, 162 mg; and caffeine, 32 mg; plus codeine phosphate in one of the following strengths: #4—60 mg (gr 1); #3—30 mg (gr ½); #2—15 mg (gr ¼); and #1—7.5 mg (gr ⅛). (Warning—may be habit forming). C-III

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

FUTURE FILE

Cancer Care National Seminar

A national seminar on community cancer care will be conducted June 1-3 at the Hyatt Regency in Indianapolis. It will be sponsored by the Clinical Oncology Program and the Graduate Medical Center of Methodist Hospital of Indiana, Inc.

Its purpose will be to encourage and give direction to developing community-initiated cancer care programs. Attendance is open to physicians, nurses, hospital administrators and allied health personnel. The registration fee is $150.

For information on the conference, which meets the criteria for 21½ AMA Category 1 credit hours, contact William Dugan, M.D., Director of Oncology Program, Methodist Hospital of Indiana, Inc., 1604 N. Capitol Ave., Indianapolis 46202.

3 Regional Seminars Planned

The International Medical Education Corp., a nonprofit organization whose postgraduate courses are approved for AMA Category 1 credit and AAFP accreditation, has three regional seminars planned that may be of special interest to readers of THE JOURNAL.

"Cardiac Ischemia and Arrhythmias" will be conducted June 15-17 at the Lincolnwood Hyatt in Chicago; "Coronary Disease, Exercise Testing and Cardiac Rehabilitation" will be held July 27-29 at the Playboy Resort, Lake Geneva, Wis.; and "ECG Interpretation and Arrhythmia Management" is planned for Aug. 10-12 at the Shanty Creek Resort, Bellaire, Mich.

For information, write Director of CME, Dept. 8, International Medical Education Corp., 64 Inverness Drive East, Englewood, Colo. 80112, or call toll free 800-525-8646.

Calendar of Events

May 2—Sixth District, Rushville
May 6—Board of Trustees
May 9—Fourth District, Columbus
May 13—Mothers Day
May 16—I.U. Alumni Day
May 17—First District, Evansville
May 20—Commission on Medical Education
May 20—Subcommission on Accreditation
May 20—Commission on Public Relations
May 23—Seventh District, Martinsville
May 28—Memorial Day
May 30—Fifth District, Terre Haute
June 6—Tenth District, Hobart
June 13—Eighth District, Portland
June 14—Ninth District, Lafayette

Alcohol, Drug Abuse Conference

The Fourth Southeastern Conference on Alcohol and Drug Abuse, the largest professional meeting of its kind in the world, will be held Dec. 5-9 at the Downtown Marriott Hotel in Atlanta. The conference, devoted to rehabilitation and clinical therapy programs, is approved for 27 AMA Category 1 credit hours.

For information, write to Conway Hunter, M.D., Fourth SECAD, Peachford Hospital, 2151 Peachford Road, N.E., Atlanta, Ga. 30338.

Natural Resources Conferences

The Illinois Institute of Natural Resources, an arm of the Illinois Environmental Protection Agency, is planning conferences on air pollution and solid waste management.

"Health Effects of Ozone" will be conducted June 12 at the Pick-Congress Hotel in Chicago. "Implementation of the Resource Conservation and Recovery Act," the 12th in a series on solid waste management, will be held May 10-11 at the Bismarck Hotel, Chicago.

Contact Eileen Johnston, Institute of Natural Resources, 309 W. Washington St., Chicago 60606. Tel: (312) 793-3895.



WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

CANCER CORNER

Health Effects: Pregnancy Use of Diethylstilbestrol

Diethylstilbestrol (DES) is a synthetic estrogen first produced in 1938. It has since been used for a wide variety of medical conditions, including prevention of pregnancy complications from the 1940s until 1971 when the FDA required product labeling to state that DES was contraindicated for use in the prevention of miscarriages. It is estimated that 4 to 6 million Americans (mothers, daughters, sons) were exposed to DES during pregnancy.

Although DES is a synthetic estrogen and differs in structure and metabolism from naturally occurring estrogens, many investigators believe there is no evidence that natural and synthetic estrogen differ in biologic effect (including toxic effects).

Studies have shown a clear association between the occurrence of a rare form of malignant vaginal cancer, clear cell adenocarcinoma, with intrauterine exposure to DES. In addition, many DES daughters were found to have a benign vaginal condition called adenosis. This condition is characterized by the presence of nonmalignant glandular tissue in the vagina.

More recently, a follow-up study at the University of Chicago revealed more breast and gynecologic cancers among exposed mothers than among a control group, although the difference was not statistically significant. A follow-up of DES mothers at the Mayo Clinic did not reveal any increases, but the dose of DES was on the average lower in the Mayo Clinic group. In addition, recent studies have shown an excess of abnormalities in the genital and possibly lower urinary tract in DES-exposed males.

A DES Task Force was formed in February 1978 by the Office of the Assistant Secretary for Health to examine the health effects of DES in pregnancy. The group examined the current state of medical knowledge concerning the drug's effects and made recommendations for immediate action as well as future research. This advisory outlines the task force's recommendations to assist physicians in managing patients who may have had pregnancy exposure to DES.

NOTIFICATION

The task force recommended that all involved persons be informed of their exposure. While recognizing difficulties (search of old medical records and locating patients who moved from the area of obstetrical care), the task force recommended that physicians should:

- Notify women to whom they prescribed the drug of their exposure and advise them about the need for follow-up medical care for themselves or their offspring.
- Check their medical records carefully when approached by patients inquiring about possible past exposure to DES in order to provide these patients with information as accurate and complete as possible.
- Provide this information without charge to the patient.

The task force emphasized that full disclosure to a patient of information concerning DES use in a past pregnancy is essential to protect the health of the patient and her children.

DES DAUGHTERS

The incidence of clear cell adenocarcinoma is estimated to be between 1.4 per 1,000 and 1.4 per 10,000 in exposed daughters, less than originally feared. Although some DES daughters have both adenosis and clear cell adenocarcinoma, the progression of adenosis to carcinoma is suspected in only two or three instances.

Active therapeutic intervention (i.e., surgery, such as vaginectomy, excision, or radiotherapy) for adenosis is not recommended but these patients should be followed by repeated examinations.

The recommended examination of asymptomatic DES daughters is as follows:

- Periodic screening examinations should begin at age 14 or at menses unless there is vaginal bleeding or discharge. If present, such bleeding or discharge calls for prompt evaluation.
- The screening procedure should be a thorough pelvic examination including Papanicolaou smear and iodine staining (one-half strength aqueous Lugol's solution). Non-stained areas of the vagina may indicate adenosis.
- DES daughters should be examined once a year. More frequent examinations may be required for cases with extensive epithelial changes.
- Colposcopy should be used selectively for examination of DES daughters. Colposcopy should be utilized (a) in all cases of abnormal cytology (Papanicolaou smear), (b) where feasible as part of the initial examination, and (c) in cases of extensive epithelial cell change such as squamous metaplasia. Biopsies should be reserved for more specific indications.

Sufficient information is not available to document fertility rate, pregnancy outcomes or long-term

effects on offspring of DES mothers.

Hysterosalpingography is not recommended as a routine screening procedure in DES daughters. It should be reserved for cases in which repeated pregnancy loss or infertility occurs. There should be a thorough discussion of this procedure between an informed patient and her physician.

DES MOTHERS

Recent studies led the task force to express serious concern about the carcinogenic potential of DES in women who took the drug during pregnancy. The task force concluded that a relationship between DES exposure during pregnancy and the risk of breast or gynecologic cancer in the mothers is not established but is suspect. Accordingly, the task force recommended that studies be organized or expanded to clarify this issue.

Asymptomatic DES mothers should be urged to follow a system of routine screening which would be considered appropriate for women without prior estrogen exposure.

If the increased risk is confirmed, the cancer may appear at an earlier age than is usual for breast cancer, i.e., within 20 years after exposure to DES. Asymptomatic DES mothers are urged to follow these medical care guidelines:

- Have an annual pelvic examination including a bimanual palpation and Papanicolaou smear.
- Undergo a breast examination that follows current National Cancer Institute guidelines for breast cancer screening.

These call for:

a. Monthly breast self-examination and the report of any abnormal findings to their physicians.

b. Annual palpation of the breasts by qualified medical personnel.

c. No mammography under age 35 for routine screening.

d. Between 35-39 annual mammography only if the woman has a personal history of breast cancer.

e. Between 40-49 annual mammography examination only if a woman has a history of breast cancer in immediate relatives (mothers and sisters) or a personal history of breast cancer.

f. Over age 50, annual screening mammography examination may be considered.

g. The task force was concerned about the use of X-ray mammography as a screening modality in DES mothers under 50 years of age. This concern related to 1) lack of proven benefit of such screening in these younger women, 2) presumed risk of radiation, and 3) experimental work suggesting an interaction between DES and radiation.

With any signs or symptoms suggestive of breast cancer, a diagnostic workup, which may include mammography, is indicated.

DES SONS

Findings of clinical studies include an increased frequency among DES-exposed males of: 1) a history of cryptorchidism, 2) hypoplastic testes, 3) epididymal cysts, and 4) abnormalities such as low sperm counts, decreased motility and possibly abnormal sperm forms. As yet, there is no definitive information on the fertility implications of these findings. The task force concluded that additional studies are needed to evaluate the possibility of an increased incidence of testicular cancer among men exposed to DES *in utero*.

Recommendations for DES-exposed sons are:

- Young boys and men exposed to DES *in utero* should be advised to undergo a physical examination to ascertain if they have abnormalities associated with DES exposure such as undescended or hypoplastic testes.
- Undescended or hypoplastic testes require medical follow-up or corrective measures. Even in cases where there has been no DES exposure, undescended and hypoplastic testes are well recognized conditions which predispose to testicular malignancy.
- Testicular self-examination is safe but unproved as a satisfactory screening technique. It has been recommended by some physicians and consumer groups.

PSYCHOSOCIAL IMPLICATIONS

Anecdotal reports indicate that some DES-exposed persons experience some degree of psychosocial problems. Although research is required to document such changes, physicians must be alert to the occurrence of such problems, especially in teenagers or young people, and provide appropriate recommendations for counseling.

USE OF DES FOR POSTCOITAL CONTRACEPTION

Although the doses and duration of DES use for postcoital contraception are less than the doses and duration which were commonly used when DES was prescribed for pregnancy complications, health risks may be similar. It also is possible that women may take the drug as a postcoital contraceptive when already pregnant from previous intercourse. In such cases, the potential offspring of such pregnancy would be exposed to the risks previ-

CONTINUED ON NEXT PAGE

ously described. Additionally, there is controversy over the efficacy of the drug for postcoital contraception and over the validity of studies showing it to be effective for that purpose. In light of these considerations, the following recommendations are made:

- Postcoital contraception with estrogens in any woman should be restricted to situations where no alternative is judged acceptable by a fully informed patient and her physician.

- Thorough birth control counseling should accompany or follow any prescription of estrogens for postcoital purposes. A principal objective of such counseling should be to discourage women to whom the drug is administered from considering it as a routine method of contraception upon which to rely in the future.

FURTHER ESTROGEN USE BY DES-EXPOSED WOMEN

The task force believes the use of DES and other estrogens should be avoided when possible by DES women. The following are specific recommendations:

- Physicians who are considering prescribing DES, or other estrogens, for postcoital purposes should inquire whether the individual has had prior pregnancy-related exposure to DES. If the drug is prescribed for an individual previously exposed *in utero,* she should be counseled concerning the heightened importance of avoiding any future use of the drug for postcoital purposes.

- The use of oral contraceptives and post menopausal replacement estrogens, though not contraindicated, must be viewed in a prudent fashion, and the decision to use them made only after careful consideration of alternate methods, patient preference, and medical judgment.

- DES should not be used to suppress lactation in DES-exposed women. The FDA is in the process of withdrawing DES for use to suppress lactation.

Most DES-exposed persons will suffer no serious, long-term effects. Hopefully, patients will have no ill effects. The Task Force Report will be published soon in its entirety. In the Department of Health, Education and Welfare's plan for follow-up to the report, a number of articles will be published and seminars and training courses will be held.

For further information, or a copy of the Task Force Report, write to the Office of Cancer Communications, National Cancer Institute, NIH, 9000 Rockville Pike, Bethesda, Md. 20014.

Bunion

There's a Word for It

RICHARD J. NOVEROSKE, M.D.
Evansville

Bunion is a two-syllabled Anglo-Saxon word that immediately directs attention to the bone that is the problem.

But in medicine, we tend to use the Latin four-syllabled expression, *hallux valgus*. I don't think this is a better term. *Hallux valgus* directs our attention toward the laterally deviated great toe. But the patient is really concerned about the bony prominence of the head of the metatarsal for the great toe; this is where the pain is, and this is where the corrective surgery is usually directed.

Then too *bunion* is short, Anglo-Saxon, and to the point; it's more clear to talk to the patient with a word he understands.

And as one successful writer says, "Never use a five dollar Latin word when a ten cent English word can do the job." Why?

Because Latin words such as *hallux valgus,* are going out of style. English has been taking over the world for about 30 years or so and will probably spread even more. English has a force and flexibility and carries with it a message of freedom that Latin doesn't begin to have. Latin has no coin in the Middle East, the Far East, or in the emerging nations of Africa. English does; it long has been the language of commerce and known by the professions in the East and has been taking hold in Africa.

As doctors, teaching by our example, we ought to discard a lot of our old Latin terms like *hallux valgus* and use plain English more; Latin is out of style, and it's not going to make a comeback in this ever-shrinking world.

2 NEW ISMA sponsored insurance plans available to you

Two new essential insurance plans have been added to broaden the range of ISMA sponsored plans. An In-Hospital Protection Plan and a Medicare Supplement Plan brings the total number of supplemental insurance plans to six that are available to eligible member physicians and professional corporations.

NEW PLANS:

IN-HOSPITAL PROTECTION PLAN provides cash benefits of $20 thru $100 per day (when accidental injury or sickness causes hospital confinement). Benefits are payable directly to you, the insured member, and commence the very first day of covered hospitalization. Intensive care and convalescent home benefits included. Spouses and eligible dependent children may be included. Benefits reduce at age 65.

MEDICARE SUPPLEMENT PLAN provides "gap filler" benefits so essential today. Medicare revised their benefits effective January 1, 1979 and these ISMA sponsored plans have been revised to update these changes, supplementing both Medicare Part A and Part B.

OTHER INSURANCE PLANS AVAILABLE:

- **INCOME PROTECTION PLAN** provides an income of up to $2,000 monthly if you are disabled and unable to work due to a covered accident or illness.
- **EXCESS MAJOR MEDICAL PLAN** provides coverage after your present plan is exhausted. Up to $500,000 coverage with a $20,000 deductible. Unlimited surgical schedule and includes extended care and nursing home benefit.
- **OVERHEAD EXPENSE PLAN** provides needed dollars to help you pay off overhead expenses (employees' salaries, rent, utilities, property taxes, etc.) in the event of your covered disability. When disability strikes—your business overhead expenses keep right on going—even when you can't.
- **FAMILY INSURANCE PLAN** provides benefits up to $100,000 in the event of your death.

Underwritten by Continental Casualty Co. and Valley Forge Life Insurance Co., Chicago, Illinois

COUPON

For information on the ISMA sponsored plans including costs, terminations, exclusions, etc.

☐ In-Hospital Protection Plan
☐ Medicare Supplement Plans
☐ Income Protection Plan
☐ Excess Major Medical Plan
☐ Overhead Expense Plan
☐ Family Insurance Plan
☐ Professional Corporation

Dr. _____

Street _____

City _____ Zip _____

Administered by



j. russell townsend and associates

Mail to:
Indiana State Medical Association
3935 North Meridian Street
Indianapolis, Indiana 46208

Notes from

The Royal College of Surgeons of England

MALCOLM B. HERRING, M.D.
AUSTIN L. GARDNER, M.D.
Indianapolis

IN HIS HUNTERIAN LECTURE, Frank McDermott, a member of the Road Trauma Committee of the Royal Australian College of Surgeons, noted that alcohol is the single most important cause of serious road accidents in Australia, just as it is in the United States.*

In Australia, legislation was enacted in 1973 calling for compulsory blood alcohol tests on all adult road accident victims. The results showed that one quarter of the driver casualties had alcohol concentrations above the legal limit of 0.05 grams per cent. Half of those exceeded 0.15 grams per cent. On the other hand, less than 3% of the general driving population exceeded the legal limit.

Mr. McDermott said the majority of those persons convicted for drunken driving were found to have alcohol-related social problems, and a fourth of those convicted were reconvicted at a later time.

He concluded that the penal approach to controlling alcohol-related road accidents is a failure, and that hope is being placed on re-education or rehabilitation before relicensing occurs. Pilot studies indicate this will decrease the recurrence markedly.

* * *

A TECHNIQUE OF EVALUATING emergency care following road accidents is offered by Alfred Dooley and Bernard G. B. Lucas. They suggest the use of a "care index," computed by adding the immediate deaths plus later deaths and dividing by the later deaths. The level of emergency care would correspond.

"Immediate death" indicates the victim died before rescue services could be applied; therefore, the higher the index, the higher the level of emergency care.

This technique was used to compare emergency care systems in North Yorkshire from January 1974 to July 1976. Based on statistics indicating the frequency of general practitioner participation in early patient care, the town appears to have a higher standard of emergency care than elsewhere in the county.

* * *

A COMPARATIVE REPORT of road accidents in west Malaysia, compiled by J. Francis Silea, points to a number of interesting concerns of the developing country in keeping traffic accidents to a minimum.

The rate of Malaysia's population increase exceeds its rate of increase in available roads; the result is road congestion and more traffic accidents. The increase in accidents appears to have no seasonal or weekend variation as it does in the U.S. and other developed nations. Helpful measures being considered include organizing emergency services, improving roads and road lighting, teaching road courtesy, and regularly testing drivers for blood alcohol.

A REPORT ON DIVERTICULAR disease in the African community of Ghana concludes that factors beyond food residue may contribute to the pathogenesis of this disorder. A study of 16 cases of colon diverticula revealed that 60% of the patients belong to higher social classes; however, all of them have been consuming traditional African high residue food. Most of the patients suffered rectal bleeding.

* * *

A MORE EXTENSIVE ROLE for local treatment in primary carcinomas of the breast is advocated by Michael Baum. He suggests that the preoperative diagnosis should involve a full screen for distant metastases in order to exclude from having a mastectomy those patients with overtly disseminated disease.

Mr. Baum says adequate localization of the cancer is essential for the maintenance of a good quality of life whether or not the patient is considered "cured."

He contends that this should be achieved in most cases by conservative or radical mastectomy with either immediate or delayed radio therapy. Furthermore, he says staging of the disease in the axilla at the time of mastectomy is necessary to evaluate the need for adjutant systemic therapy, but this can be done adequately by dissection of the lower third of the axillary contents or by pectoral node biopsy.

*The information in this review is based on the November 1978 issue of the Annals of the Royal College of Surgeons of England.

V-Cillin K®

penicillin V potassium

is the most widely prescribed brand of oral penicillin



Tablets
125, 250, and 500 mg*
Oral Solution
125 and 250 mg*/5 ml

V-Cillin K®
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. [102175]

***Equivalent to penicillin V.**

Additional information available to the profession on request.

Lilly

Eli Lilly and Company
Indianapolis, Indiana 46206

900416

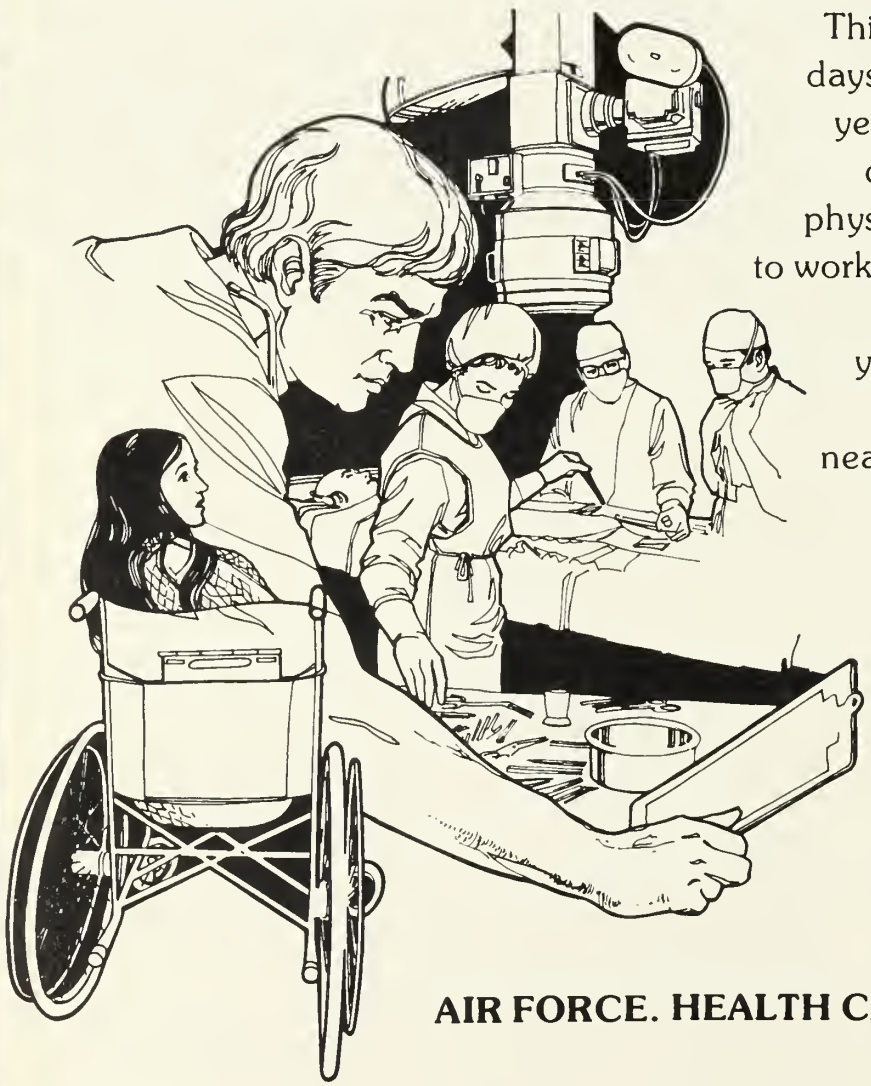
AIR FORCE MEDICINE

IT CAN MEAN A GREAT WAY OF LIFE FOR YOU.

Air Force medicine is practiced in hospitals and clinics around the world. From the 3 bed hospital at Zarogoza, Spain to the 1000 bed Wilford Hall medical complex in San Antonio, Texas, our health care system utilizes excellent equipment and highly trained and motivated staff personnel.

Air Force doctors practice medicine. Administrative duties and paperwork are kept to a minimum.

An excellent program of compensation and entitlements is available. This program includes 30 days of paid vacation each year, medical and dental care, and, for qualified physicians, an opportunity to work toward specialization.



Find out more about your future in Air Force medicine. Contact the nearest Air Force medical recruiter or call 1-800-523-5000 (800-362-5696 in Pennsylvania). We'll answer your questions promptly and without obligation.

AIR FORCE. HEALTH CARE AT ITS BEST.

AIR FORCE

THE JOURNAL, in cooperation with the Division of Postgraduate and Continuing Medical Education of the Indiana University School of Medicine, offers its readers a Continuing Medical Education program. This is the 17th in a series of CME articles, produced by the faculty of the School of Medicine and is supported by a grant from its Division of Postgraduate and Continuing Medical Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 365.



Radiology of Pleural Disease

VERNON A. VIX, M.D.
Indianapolis

THE SPECIFIC ETIOLOGY of pleural effusion can seldom be diagnosed radiographically. The role of radiology is rather one of detecting the presence of fluid. Large free effusions are readily detected on the ordinary chest x-ray. The use of the lateral decubitus view makes it possible to detect as little as 15 ml. of fluid layered along the dependent chest wall. Detecting this fluid adds to the completeness of the patient's evaluation and, if aspirated, provides material for more specific laboratory diagnosis.

The author is a professor of radiology, Indiana University School of Medicine, Indianapolis. He received his M.D. degree from the University of Pennsylvania in 1949. He is a member of the Radiological Society of North America.

FIGURE 1-A
Lateral upright radiograph shows a density that simulates lower lobe disease.



Pleural fluid may simulate other pathology. It may layer on the diaphragm simulating an elevated diaphragm (subpulmonic effusion), or its distribution may simulate lobar pathology. The opacity produced by a large amount of fluid may obscure underlying lung disease. Whenever such circumstances are suspected, radiographs should be obtained with the patient positioned to make use of the effect of gravity on free pleural effusions. These studies will be decisive. The previously mentioned lateral decubitus view will shift the density along the dependent chest wall, establishing it to be fluid. Less commonly used but very useful is a prone cross table lateral view of the chest *(Figure 1)*. This position is especially useful in evaluating the lower lobes in the presence of large pleural effusions.

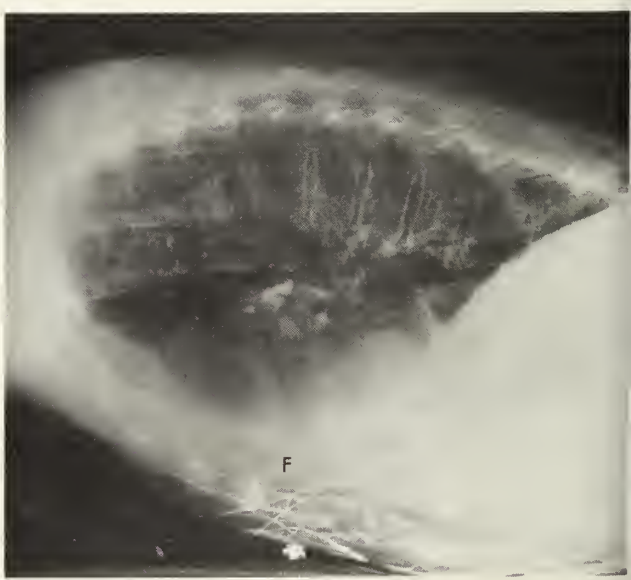


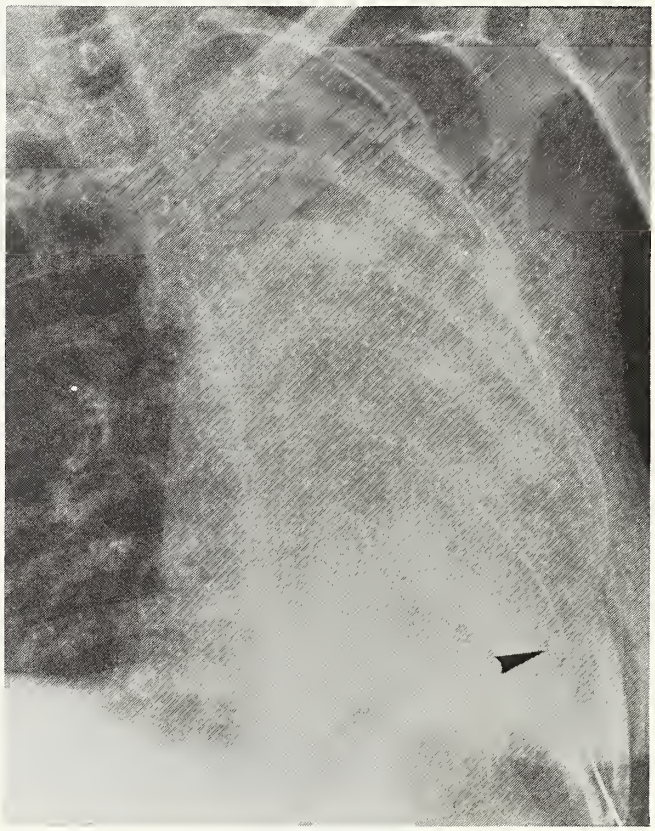
FIGURE 1-B
On a prone cross table lateral radiograph fluid (F) is layered in the anterior thorax. This fluid shift in response to gravity makes it possible to evaluate the lower lobes. In this case they are normal.

Loculated pleural effusion will not shift in response to a change in the patient's position. If loculated effusion is clinically suspected, oblique views of the chest should be obtained. When viewed in profile, a locule of fluid against the chest wall has the appearance of a rain drop hanging from a windowpane.

Ultrasound is very valuable in determining the fluid nature of radiographic chest densities. It is being used with increasing frequency in our department to determine whether or not a density is fluid, to locate the diaphragm prior to tapping a small free effusion and to localize loculated fluid prior to aspiration or tube insertion. Ultrasound is especially useful in detecting the presence of pleural fluid when an entire h e m i t h o r a x is radiographically dense *(Figure 2).*

FIGURE 2-A

Dense left hemithorax in a patient suspected of having an empyema. Tube insertion (arrow) failed to recover pus.



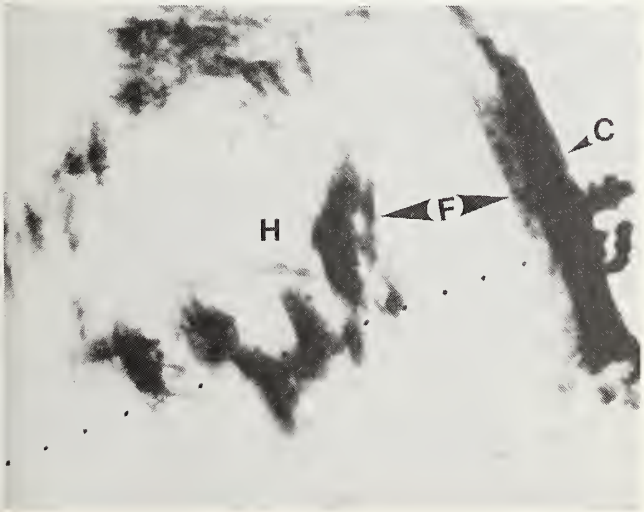


FIGURE 2-B

Transverse ultrasound scan done high in the left axilla shows an echo-free space indicating fluid (F). Chest wall (C) and heart (H). Reinsertion of the tube directed by ultrasound localization successfully drained a large amount of pus. *(Reproduced with permission of Seminars in Roentgenology)*

FIGURE 3-A

Portable "upright" chest radiograph done with a slightly tilted x-ray beam shows some pleural reaction at the right lung base.



Air-fluid levels (gas-fluid) within the thorax are always abnormal. In certain clinical circumstances when they occur spontaneously in the pleural space (in absence of thoracocentesis), they are highly suggestive of empyema and a bronchopleural fistula. The detection of an air-fluid level requires that the film be exposed with a *horizontal* x-ray beam. Many portable chest x-rays that are labeled upright are taken with the patient in a near vertical position and the x-ray beam tilted from the horizontal to compensate for this position. As little as 15 degrees tilt of the x-ray beam from horizontal will obscure a fluid level *(Figure 3).* The horizontal x-ray beam is important, not the position of the patient.



FIGURE 3-B

Same patient in the right lateral decubitus position examined with a horizontal x-ray beam shows a well defined air-fluid level (arrow) due to bronchopleural fistula.

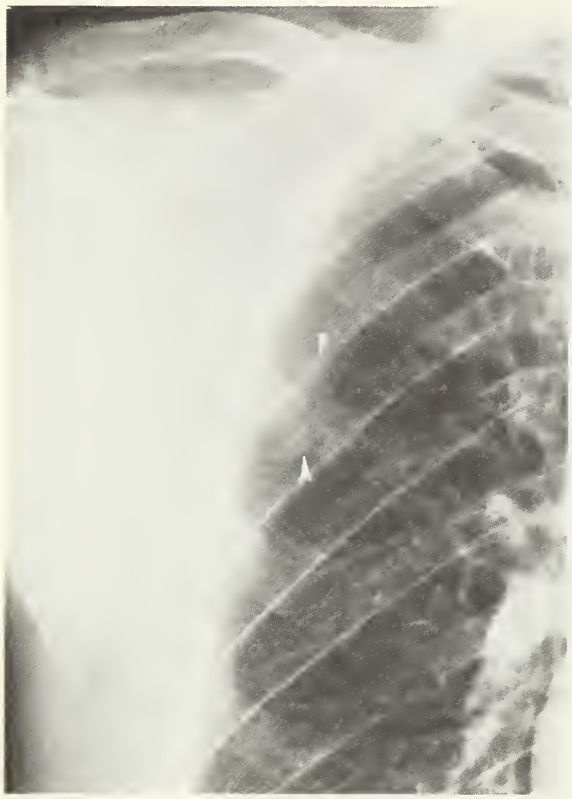
FIGURE 4

Two pleural tumor implants. Upper (black arrow) in profile. Lower (white arrow) seen *en face* shows an "incomplete" border.



Pleural pathology may at times be difficult to recognize or it may produce subtle radiographic findings. There are several helps in radiographic recognition. Any chest x-ray density that does not correspond to a known anatomical division of the chest should be suspected as being pleural in origin. Also any radiographic density that has an "incomplete" border should be suspected as being related to either the pleural or external surface of the chest wall *(Figure 4)*. Simple observation of the patient will detect those that are related to the external chest wall while oblique views or radiographs in other than standard positions (decubitus or prone) may be needed to clarify those in the pleural space.

FIGURE 5-A
Vague density overlying the anterior third rib (arrows).

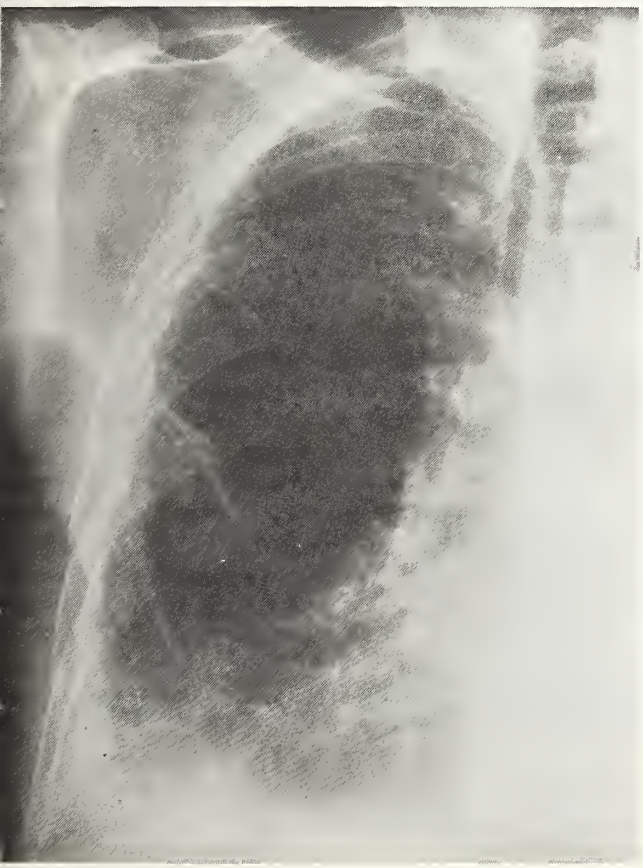


Pleural thickening is commonly seen in the costophrenic sinuses and over the apices of the lung secondary to past inflammatory disease. There is, however, another type of pleural thickening that is highly suggestive of past asbestos exposure.[1] This type of pleural thickening spares the apices and costophrenic sinuses. It occurs on the parietal pleura of the thorax or diaphragm in the absence of adjacent parenchymal disease. The involved areas are discrete and plateau or plaque like in configuration. These plaques may vary in size from several millimeters to large sheet-like coalescent areas of pleural thickening. The border of these vague radiographic densities, when seen *en face,* may be either irregular "holly leaf" in configuration or "incomplete." They are readily recognized in a profile or tangential view *(Figure 5).* Oblique views of the chest supplemented by fluroscopy will clarify their true nature. Pleural plaques may calcify. These plaques are not rare and, because exposure to asbestos has been widespread, we can anticipate seeing them more frequently in the future. The known increased incidence of carcinoma of the lung and malignant mesothelioma related to asbestos exposure has obvious public health implications.[2]

FIGURE 5-B
Left anterior oblique view of the same area shows a well defined pleural plaque (arrows).



FIGURE 6-A
Pleural thickening and pleural effusion in the right hemithorax.



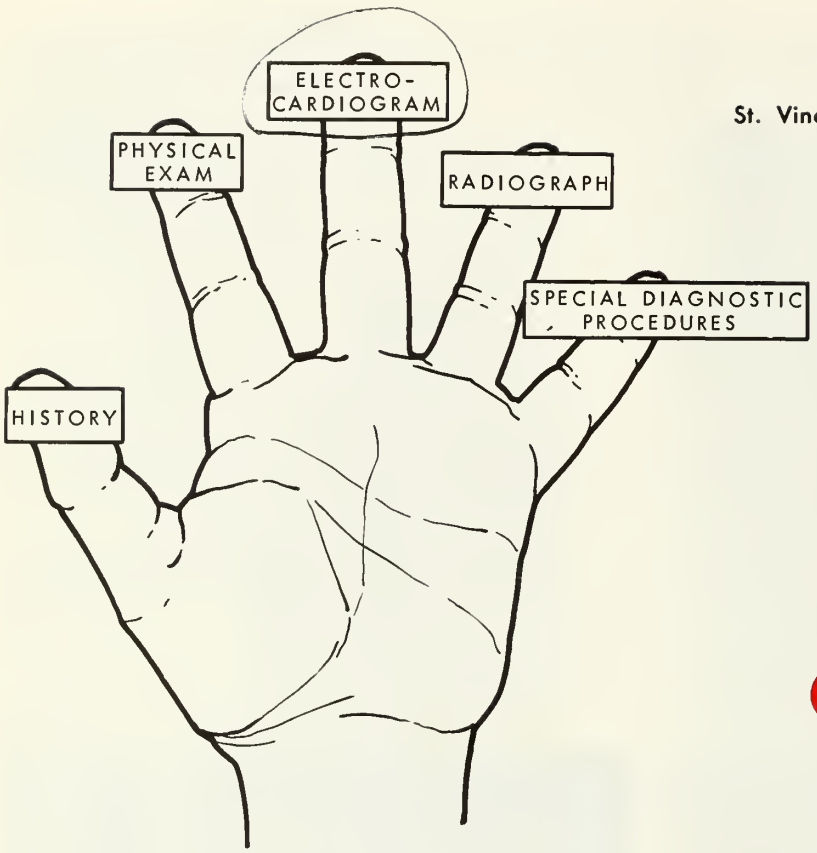
Malignant diffuse mesothelioma is occurring with increasing frequency. Two to five new cases are seen each year in our department. On the other hand, no instance of a localized benign mesothelioma has been observed in more than five years. Malignant mesotheliomas rapidly implant themselves over the entire pleural surface and encase the lung. This produces a persistent pleural effusion and/or an appearance of pleural thickening similar to any cause including a fibrothorax secondary to past inflammatory disease *(Figure 6)*. Similar encasement of the lung may be seen in primary lung malignancies (almost always adenocarcinoma) and lymphomas (most often histocytic). Unexplained pleural thickening, particularly if progressive, should lead one to suspect a diffuse malignant mesothelioma. Occasionally rib destruction will be observed.

REFERENCES

1. Hourihane DO, Lessof L, Richardson PC: Hyaline and calcified pleural plaques as an index of exposure to asbestos: A study of radiological and pathological features of 100 cases with a consideration of epidemiology. *Br Med J*, 1:1069-1074, 1966.
2. Selikoff IH, Hammond E, Cuyler, Churg J: Asbestos exposure, smoking, and neoplasia. *JAMA*, 204:106-112, 1968.



FIGURE 6-B
Five months later, the pleural thickening has increased (arrows). Biopsy showed malignant mesothelioma.



R. JOE NOBLE, M.D.
CLIFFORD C. HALLAM, M.D.
EDWARD F. STEINMETZ, M.D.
St. Vincent Hospital and Health Care Center
Indianapolis

THE FIVE FINGERS OF CARDIOLOGY

The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac-diagnosis.

Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.

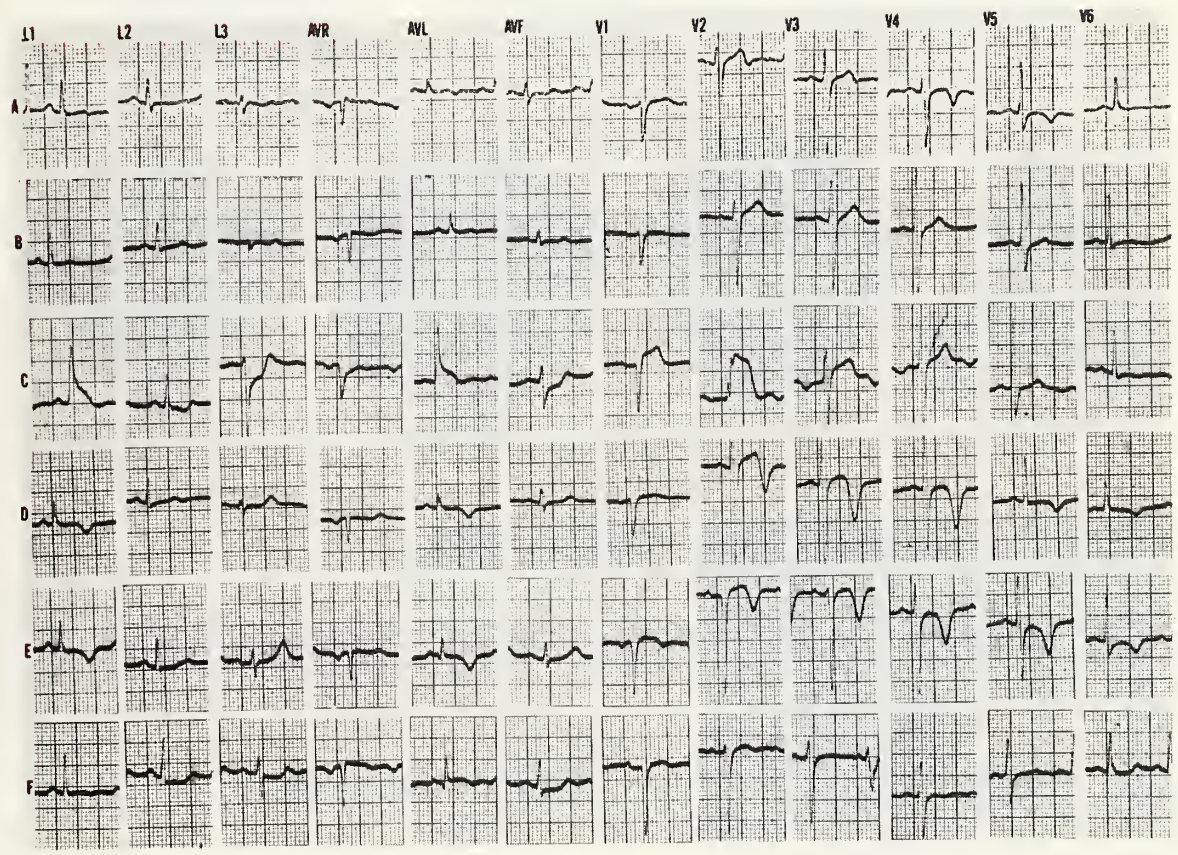
QUESTIONS:

Six serial electrocardiograms are recorded on a patient who has previously been hospitalized for myocardial infarction.

Which of the electrocardiograms are recorded during pain; and which are recorded when the patient is pain-free?

What region of the myocardium is ischemic, and which coronary artery would be expected to demonstrate a significant obstruction?

A Self-Assessment



ANSWER:

Tracings A, D, and E were recorded when the patient was asymptomatic. Tracing A demonstrates T wave inversion consistent with prior subendocardial anterior wall infarction; tracings D and E were recorded in the absence of pain, three months apart, demonstrating additional T wave inversion due to additional infarction following the recording of tracing A.

The remainder of the electrocardiograms (B, C, and F) were recorded during angina pectoris. These tracings demonstrate normalization of the abnormal, inverted T waves with ischemia. ST segment elevation and tall, upright T waves, such as recorded in V_3 and V_4 during severe angina (C), superimposed upon pre-existent ST segment depression and T wave inversion (A), result in isoelectric ST segments and normal T waves during less severe angina (B). Note the reciprocal ST segment depression in leads II, III, and aVF, when ST segment elevation is present in the anterior precordial leads (C). However, ST segment depression is also recorded (F) in leads II, III, and aVF during angina pectoris, when anterior precordial T waves are more normal and ST segment elevation less apparent.

This very common phenomenon—normalization of abnormal T waves by ischemia—may lead to the incorrect interpretation of an improved status, when, in fact, additional ischemia is superimposed upon previous infarction. Furthermore, the reciprocal ST segment depression in other leads might lead to an incorrect interpretation of ischemia of the inferior wall of the heart rather than the anterior wall. Coronary cineangiography confirmed a tight obstruction of the left anterior descending coronary artery, supplying blood to the anterior wall of the heart; the right coronary artery, supplying blood to the inferior ventricular surface, was widely patent.

For hemorrhoids and other anorectal conditions



External hemorrhoids



Internal hemorrhoids



Pruritus ani



Proctitis



Anal fissures



Easy to handle, easy to insert, comfortably shaped—Rx only

Easy to apply, nonstaining—Rx only

Prescribe Anusol-HC®

Suppositories/Cream

for symptomatic relief

- Effectively reduces inflammation and edema
- Rapidly relieves pain and itching

ANUSOL-HC® SUPPOSITORIES
Hemorrhoidal Suppositories
ANUSOL-HC® CREAM
Rectal Cream with Hydrocortisone Acetate
CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg, bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%, benzyl benzoate, 1.2%; Peruvian balsam, 1.8%, zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg, bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg, benzyl benzoate, 12.0 mg; Peruvian balsam, 18.0 mg, zinc oxide, 110.0 mg, also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani.

Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: Anusol-HC® Suppositories and Anusol-HC® Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24); in silver foil strips with Anusol-HC W/C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01); with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F.)

Full information is available on request.

Warner/Chilcott
Division, Warner-Lambert Company
Morris Plains, N.J. 07950

AN-GP-91

The professional source of anorectal comfort

The Influence of a New, Improved Theophylline Assay Procedure on Laboratory Analyses

RICHARD H. B. SAMPLE
MELVIN R. GLICK, Ph.D.
TJIEN O. OEI, M.D.
Indianapolis

The authors believe they are among the first clinical pathology departments in Indiana to use the HPLC method for theophylline assay. This method has allowed them to offer theophylline determinations on a STAT basis around the clock . . .

METHODS FOR ANALYSIS of serum or plasma theophylline concentration have suffered from being either non-selective or too demanding of technical skills and equipment for daily use in the routine clinical laboratory. The spectrophotometric procedure requires a large sample volume with measurement at more than one wave length to detect background interferences.[1,2] Gas liquid chromatographic (GLC) methods are more selective but require either on-column or off-column derivitization, making the analysis of theophylline difficult and time consuming. In our experience with a GLC method with flame ionization detection, interferences with theophylline are sometimes encountered and this method is hardly suitable for routine or

TABLE 1

Reproducibility of theophylline standards (in serum) and cantrol serum when measured each analytical day by either GLC ar HPLC. Coefficient af variatian (C.V.) was calculated as the mean divided by ane standard deviatian. The number of determinatians used far each calculation is given in parenthesis following the C.V.

Nominal Theophylline Concentration	Coefficient of Variation GLC	HPLC
10 ug/ml	11.2% (38)	6.6% (27)
30 ug/ml	9.7% (38)	5.1% (25)
Control	8.9% (38)	4.2% (26)

From the Department of Clinical Pathology, Indiana University School of Medicine, Indianapolis.

daily use in the busy clinical laboratory.[3]

We present here a simple micromethod for theophylline requiring a sample of only 0.05 ml. The method is sensitive and selective, and is suitable for both routine and STAT analysis of plasma or serum theophylline. Our experience with this method is presented to show the superiority of HPLC over the previous methods for the clinical laboratory determination of theophylline.

This new procedure is a selective adaptation of several techniques[4,5,6] and has been used in the Clinical Pathology laboratory here six days a week since July 1977 with no down-time or unscheduled maintenance required. It also is available continuously for emergency analysis of theophylline, if the clinical conditions warrant this. A major advantage of the new method over others is its complete sample clean-up, allowing extended use of a single HPLC column with no maintenance. The method is suitable for single emergency analysis as well as the multiple samples expected by a busy medical laboratory service.

METHODS

All analyses were performed on a Waters Model ALC 200 HPLC employing a Model 440 Absorbance detector and a U6K Universal Injector. A 4mm ID × 30 cm column was used throughout. The eluting mobile phase was sodium acetate (pH 4.0) and acetonitrile (93/7) flowing at a rate of 2.0 ml/min. Detection was at 280 nm and the scale setting was 0.01 AUFS. Recorder chart speed was 5 mm/min, with full scale setting of 10 millivolts.

Theophylline was extracted from serum or plasma by mixing 50 ul of sample (any anticoagulant) with 200 ul of internal standard solution containing 20 mg/l β-hydroxy-

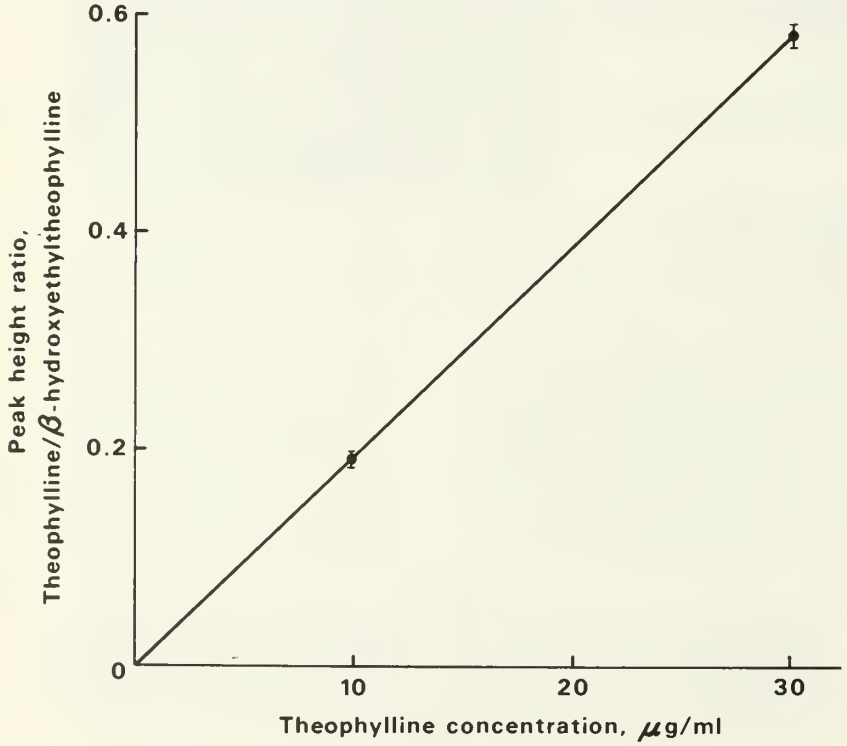


FIGURE 1

Calibration Curve (means ± standard error, n=20) of theophylline versus ratio of theophylline and internal standard. Each point was obtained daily for 20 days. Conditions: μBondapak C-18 column in Waters Associates Chromatograph, chart speed 5 mm/min, eluting solvent 7% acetonitrile, flow rate 2.0 ml/min.

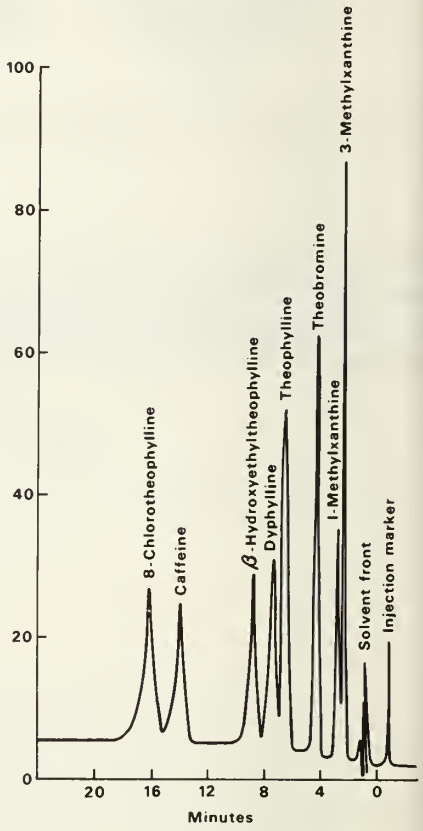


FIGURE 2

Chromatographic separation of eight xanthine derivatives under conditions described in Figure 1. Two ul of solution were injected, containing the following concentrations of each compound (ug/ml): 3-methylxanthine, 50; 1-methylxanthine, 34; theobromine, 43; theophylline, 55; dyphylline, 44; β-hydroxyethyltheophylline, 39; caffeine, 44; 8-chlorotheophylline, 40.

ethyltheophylline in a 50% (V/V) mixture of chloroform and isopropanol. The resulting emulsion was centrifuged for 5 minutes and the aqueous (upper) layer and protein disc were aspirated and discarded. The organic solution was then transferred to a clean tube and evaporated with a stream of air. After addition of 50 ul of methanol to the dry tube, six ul of the extractant was injected into the chromatograph.

Theophylline was quantitated by calculating the peak-height ratio of theophylline to internal standard. Theophylline standards were made from pooled blood bank plasma with 5, 10, 20, 30 and 40 ug/ml theophylline added. The resulting curve from these standards was linear over the entire range, as *Figure 1* shows. Day-to-day reproducibility of the calibration points and the control serum is presented in *Table 1*.

RESULTS

A chromatograph of 1-methylxanthine, 3 - methylxanthine, theobromine, theophylline, dyphylline, β - hydroxyethyltheophylline, 8-chlorotheophylline, and caffeine is shown in *Figure 2*. It is clear that none of these xanthine derivatives interfere with the quantitation of either theophylline or internal standard by this method.

Direct injection of serum or plasma causes clogging of the column by protein. A two-phase extraction, such as ours, provides excellent sample clean-up and separation. This is indicated by more than 1,200 injections on the same column with no increase in column back-pressure.

After more than 4,000 injections we have not yet discovered any interferences with our procedure. Besides the previously mentioned xanthines, we also studied uric acid, phenobarbital and bilirubin for possible interference. Uric acid elutes well before theophylline, phenobarbital was not seen after 30 minutes, and bilirubin caused no interference. It has also been reported that silicone serum separators interfere with the determination of theophylline in some GLC procedures. We searched for such interference and have not been able to document any interference by these compounds with our procedure.

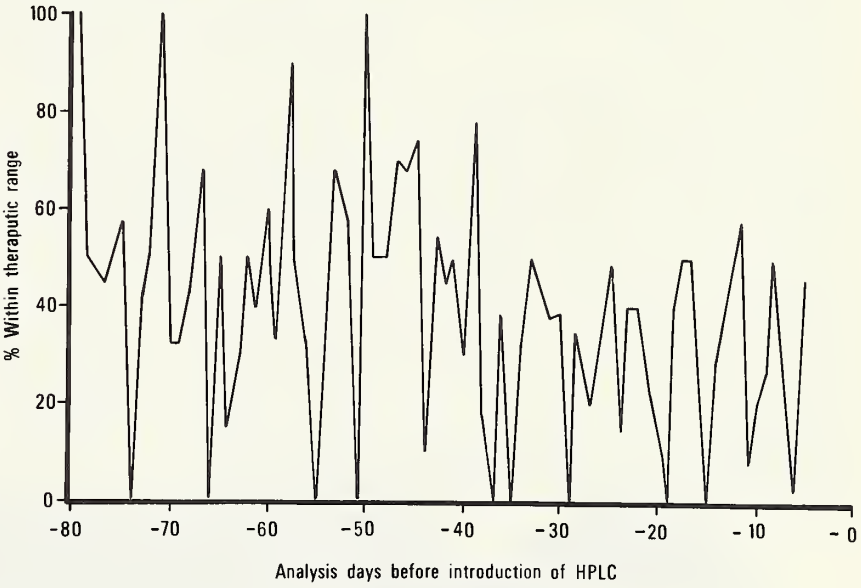


FIGURE 3

Percentage of patients' specimens having theophylline concentration within the therapeutic range (10-20 ug/ml) on each day of analysis (average: two days per week), during the year preceding introduction of HPLC method.

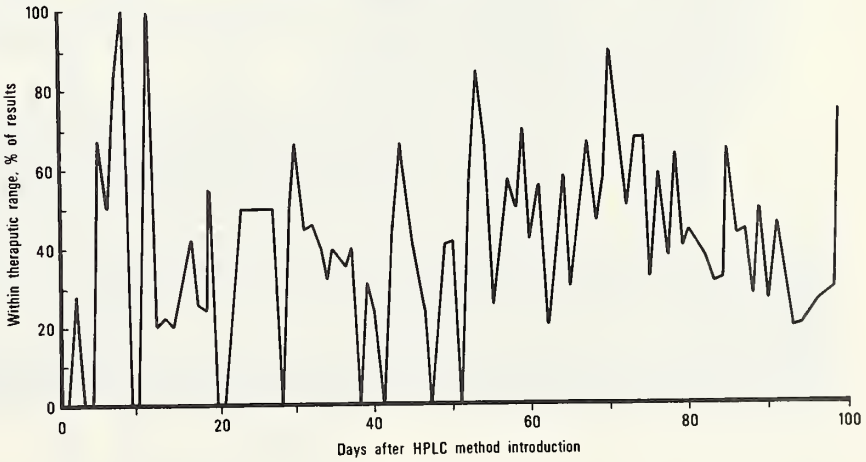


FIGURE 4

Percentage of patients' specimens having theophylline concentration within the therapeutic range on each day of analysis (6 days per week) immediately following introduction of HPLC method.

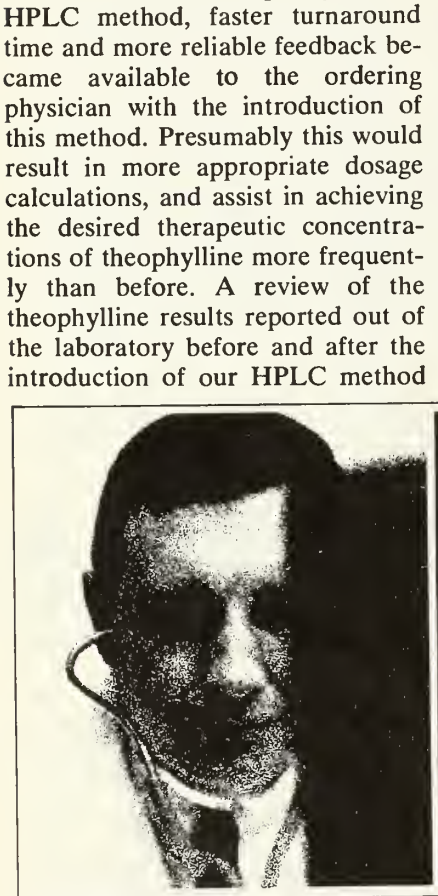
Since June 21, 1977, we have been using this method routinely six days a week for theophylline assays, and also as a STAT procedure if the determination is justified. The previous procedure used in this laboratory was a GLC method, so a comparison of results and experiences can be given.

Because of the simplicity of the HPLC method, faster turnaround time and more reliable feedback became available to the ordering physician with the introduction of this method. Presumably this would result in more appropriate dosage calculations, and assist in achieving the desired therapeutic concentrations of theophylline more frequently than before. A review of the theophylline results reported out of the laboratory before and after the introduction of our HPLC method is shown in *Figures 3 and 4*. After an initial acceptance period of about two months, there have been no days during which none of the theophylline analyses requested were within the therapeutic range. Prior to this time, however, none of the samples contained therapeutic concentrations of theophylline during 22 of the total of 125 days.

The explanation for this improvement in ability by clinicians to obtain serum theophylline concentrations "on target" lies in the faster analysis time and better acceptance of the results, with appropriate modification of dosage. Further experience with this method for theophylline assays has confirmed these initial findings. The method continues to be reliable and is highly acceptable for routine use in the clinical laboratory.

REFERENCES

1. Schack JA, Waxler SH: An ultraviolet spectrophotometric method for the determination of theophylline and theobromine in blood and tissue. *J Pharmacol Exp Ther*, 97:283, 1949.
2. Jatlow P: Ultraviolet spectrophotometry of theophylline in plasma in the presence of barbituates. *Clin Chem*, 21:1518, 1975.
3. Oei TO, Glick MR, Sample RHB: ASCP Summary Report, 15:1, 1978.
4. Bates GD: A rapid micro-capillary determination of serum theophylline by high-pressure liquid chromatography with no sample pretreatment. *Clin Chem*, 22:1167, 1976.
5. Orcutt JJ, Kozak PP Jr, Sherwin AG, Cummins LH: Micro scale method for theophylline in body fluids by reversed-phase, high pressure liquid chromatography. *Clin Chem* 23:599-601, 1977.
6. Adams RF, Vandemark FL, Schmid GJ: More sensitive high pressure liquid chromatographic determination of theophylline in serum. *Clin Chem* 22:1903-1906, 1976.



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS

Operated by PHYSICIANS

For the protection of PHYSICIANS

P&SLI

Physicians & Surgeons Liability Insurance Co., Inc
800 MacArthur Boulevard / Munster, Indiana 46321
219 836-2288

Evaluation and Management of the Newborn with Jaundice

ERIC YANCY, M.D.[1]
RICHARD L. SCHREINER, M.D.[2]
Indianapolis

An organized approach to the jaundiced newborn is necessary to prevent serious brain damage associated with kernicterus. The physiology and differential diagnosis of jaundice in the newborn is discussed and a reasonable approach to the evaluation of the newborn with jaundice is presented . . .

[1]Chief Resident, Pediatrics
[2]Associate Professor of Pediatrics

From the Department of Pediatrics, Indiana University School of Medicine and The James Whitcomb Riley Hospital for Children, Indianapolis.

Correspondence and reprints: Richard L. Schreiner, M.D., Department of Pediatrics, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis 46202.

JAUNDICE occurs in almost all newborns and usually causes no serious problems. Unfortunately, if the jaundice is not treated appropriately, it may result in death or serious brain damage in a small percentage of infants.

In the neonate it is more difficult to diagnose jaundice visually than in adults. Usually the bilirubin level must be 4 to 6 mg% before the jaundice is obvious. In the black child jaundice may be less obvious at levels of 4 to 6 mg%; in these cases examination of the sclerae may be more helpful.

METABOLISM

There are two types of bilirubin in the blood—unconjugated and conjugated bilirubin. Unconjugated bilirubin (indirect) comprises more than 90% of all the bilirubin in the serum in most patients. Conjugated (direct bilirubin) should comprise no more than 10% of the total serum bilirubin and the concentration usually should be less than 1 to 1.5 mg%.

The newborn produces between 8 and 9 mg/kg/day of bilirubin or two to three times as much as the adult. The serum bilirubin concentration is equal to the difference of the bilirubin production and the bilirubin clearance. Any disorder that increases production or interferes with metabolism or excretion will cause an elevation of the serum bilirubin.

Seventy-five per cent of the bilirubin produced in the newborn comes from the breakdown of red blood cells *(Figure 1)*. One gram of hemoglobin, when metabolized to bilirubin, yields 35 mg of bilirubin. Twenty-five per cent of the bilirubin produced in the newborn results from ineffective erythropoiesis and the breakdown of other heme proteins. Ineffective erythropoiesis refers to red blood cells undergoing formation in the bone marrow but which are destroyed before they mature to normal red blood cells.

The indirect bilirubin formed from the hemolysis of red blood cells is bound to albumin in the blood. It is then taken up by the liver cell and bound to Y and Z proteins. This unconjugated or indirect bilirubin is then conjugated by an enzyme called glucuronyl transferase. This changes the indirect or unconjugated bilirubin to direct or conjugated bilirubin. The conjugated bilirubin is then excreted in the bile. In the adult most of the bile is then excreted in the stool. However, in the newborn, most of the bilirubin may be reabsorbed (the enterohepatic circulation). This is secondary to two facts: 1) there are no bacteria in the newborn's stool to break down the bilirubin; and 2) there is an enzyme in the newborn gut called bilirubin glucuronidase that deconjugates the bilirubin, which can then be reabsorbed into the blood by the intestinal mucosa.

LEGEND

Figure 1—Physiology of Jaundice in the Newborn, modified from Maisels, *Pediatr Clin North Am*, 19:452, 1972.

Figure 2—Causes of Jaundice

Figure 3—Laboratory Evaluation of Jaundice

Figure 4—The Direct Coombs Test, reproduced with permission from Schreiner, *Care of the Newborn*, Indiana University Press.

Figure 5—Indirect Coombs Test, reproduced with permission from Schreiner, *Care of the Newborn*, Indiana University Press.

Figure 6—Standards and Recommendations for Hospital Care of Newborn Infants, American Academy of Pediatrics, p. 95, 1977.

Figure 7—Phototherapy

DIAGNOSTIC APPROACH TO THE YELLOW NEONATE

Figure 2 shows the different causes of jaundice in the newborn. Hemolytic disease may be due to Rh or ABO incompatibility. In addition, it may be due to other unusual immune hemolytic disease or non-immune hemolytic diseases, e.g., hereditary spherocytosis. Liver disease as a cause of jaundice is unusual in the immediate newborn period. Metabolic diseases like hypothyroidism, galactosemia and aminoaciduria always should b considered in the differential di agnoses of neonatal jaundice. Breas feeding also may cause jaundice af ter the first five or six days of lif and is thought to be secondary t a steroid in the breast milk that in hibits glucuronyl transferase, al though this is controversial. Breas jaundice has never been known t cause kernicterus. However, th burden of proof of the diagnosis i on the physician. That is, just be cause an infant is jaundiced and i breast feeding does not mean th jaundice is secondary to the breas feeding. In these infants we rec ommend a similar approach to th diagnosis of jaundice as describe below and discontinuing breas feeding for one to two days. If th jaundice is secondary to the breas feeding the bilirubin level will dro quickly, breast feeding can be rein stituted, and usually no furth problems with jaundice will occu

Infants of diabetic mothers als have an increased incidence jaundice. This may be secondar to the increased red blood cell mas to the bruising and trauma that o cur because many of the infants a large, and also to the fact that ma infants of diabetic mothers are pr mature. Infants with high bowel o struction also may have jaundic Hyperviscosity or an elevated hem tocrit (venous hematocrit great than 60-65%) can result in jau dice. Certain drugs that the moth receives may cause jaundice in t newborn. The most recently d scribed drug for affecting neonat jaundice is oxytocin.

Every time an infant preser with jaundice, the physician shou quickly run through this differenti diagnosis rather than first diagnc ing physiologic jaundice. Physiolo ic jaundice should be a diagnosis exclusion after other causes of jau dice have been considered and rul out. Especially the correctab

causes of jaundice—for example, infection, hemolytic disease, bruising, hyperviscosity, bowel obstruction and metabolic diseases—should be seriously considered in all infants.

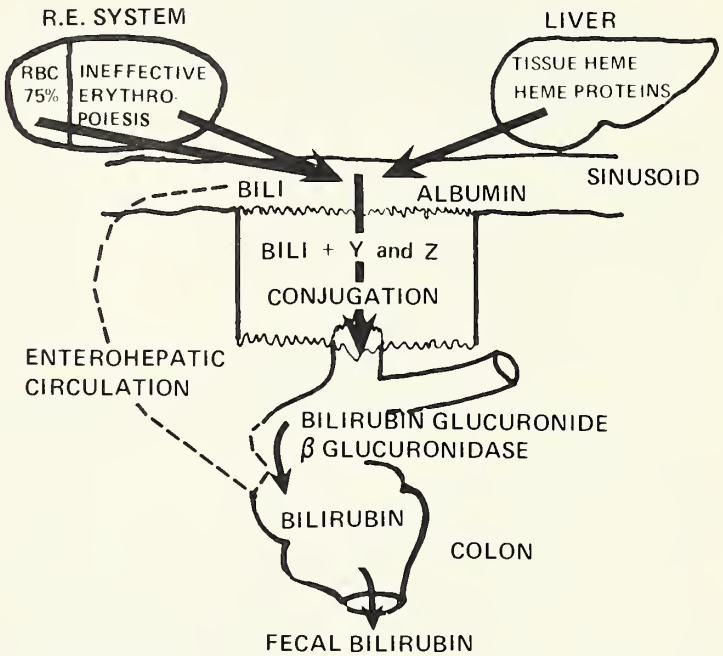
When jaundice lasts longer than the normal course, one should always think of hypothyroidism. This is one of the many ways in which hypothyroidism in the newborn can present. In any infant with a prolonged elevated indirect bilirubin, a T_4 and/or TSH should be obtained.

LABORATORY EVALUATION OF THE INFANT WITH JAUNDICE

The laboratory evaluation of the infant with jaundice will be divided into a basic minimal workup for all infants and a further, more elaborate workup which would apply to some infants. If an infant has jaundice such that the physician is considering treatment (phototherapy or exchange transfusion), a basic minimal laboratory evaluation must be performed. *Figure 3* lists these laboratory evaluations. A good history and physical, looking for signs of sepsis, congenital infection, bowel obstruction, hypothyroidism and hepatosplenomegaly, are mandatory. Every infant should have a bilirubin, including a fractionated bilirubin (direct and indirect). A blood type and Rh of the mother should be done. If there is a possibility of ABO incompatibility, an indirect Coombs or anti A or B titer should also be done on the infant. A hematocrit and a peripheral blood smear should be performed. The blood smear should be examined for evidence of abnormal red cells, which might suggest hemolysis from congenital spherocytosis or other red blood cell defect. A reticulocyte count greater than 7 to 10% would also suggest a hemolytic disease.

Sepsis must also be seriously considered in any infant with jaundice. If the infant has any other symptoms or signs suggestive of infection, a blood, urine and spinal fluid culture should be obtained.

FIGURE 1



The direct Coombs (*Figure 4*) measures antibodies that are attached to red blood cells. This test does not determine which type of antibody is on the red blood cell. That is, if you have a positive direct Coombs it is impossible to tell from that test alone whether the positive Coombs is due to Rh disease, ABO disease or some other immune hemolytic disease. In this case, an indirect Coombs or antibody titer must be performed.

Indirect Coombs (*Figure 5*) or antibody titer tests for antibodies in the plasma that are not attached to red blood cells. With this test the physician may look for specific types of antibodies. For example, an indirect Coombs with A cells (also called anti-A antibody titer in some laboratories) will test spe-

FIGURE 2
Causes of Jaundice

1. Physiologic jaundice
2. Hemolytic disease (usually Rh or ABO incompatibility)
3. Infection (congenital infection and postnatal sepsis)
4. Hematomas and bruising
5. Liver disease (neonatal hepatitis, bile obstruction)
6. Metabolic disease (hypothyroidism, hypoglycemia, galactosemia)
7. Breast feeding
8. Infants of diabetic mothers (IDM)
9. Bowel obstruction
10. High hematocrit
11. Large doses of Vitamin K (water soluble analogues)
12. Maternal drugs (Oxytocin)

FIGURE 3
Laboratory Evaluation of Jaundice

I. Minimal Workup for all Infants with Significant Jaundice (bilirubin more than 10-15, or more than 5-10 if less than 24 hours old):
 - Good examination of infant for lethargy, cyanosis, large liver and spleen, signs of sepsis
 - Direct and indirect bilirubin
 - Blood type and Rh of mother
 - Blood type, Rh, direct Coombs of infant (also indirect Coombs if ABO incompatibility suspected)
 - CBC including exam of blood smear, retic count
 - ?Blood and urine culture

II. Other Studies Sometimes Indicated:
 - Spinal tap
 - Urine for reducing substances (galactosemia)
 - T_4
 - Titers and cultures for congenital infection (Syphilis, toxoplasmosis, CID, rubella)
 - Further hemolytic workup
 - Further hepatic workup
 - Reserve albumin binding capacity
 - "Free" serum bilirubin (sephadex column)

cifically for anti-A antibody in the plasma of the patient.

The above tests are the basic laboratory tests that should be done on every infant with a bilirubin considered by the physician to be high enough to warrant therapy.

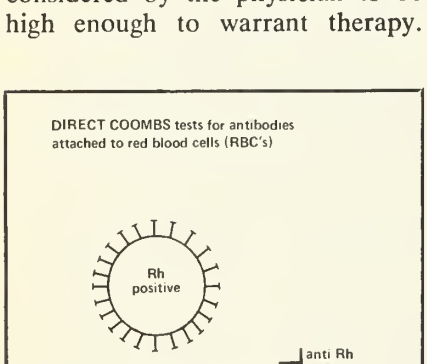


FIGURE 4

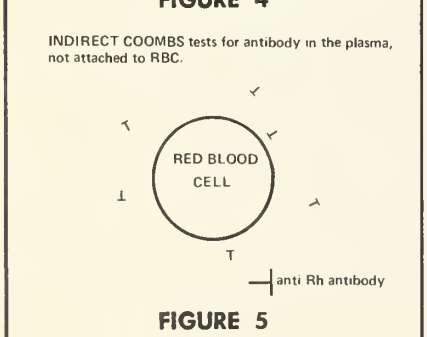


FIGURE 5

Figure 3 shows other tests that also should be considered in certain infants. If sepsis is a possibility, a spinal tap should be performed. A positive urine for reducing substances with a negative urine for glucose would suggest galactosemia. If there is a suggestion of hypothyroidism such as a prolonged elevated indirect bilirubin, a T_4 and/or TSH should be done. If there is evidence of congenital infection, cultures and titers should be performed for toxoplasmosis, rubella, cytomegalovirus and herpes infection. If the blood smear or reticulocyte counts suggest hemolysis, red blood cell tests looking for hereditary spherocytosis, pyruvate kinase deficiency, etc., should be done. If hepatosplenomegaly of unknown etiology is present or there is elevated direct bilirubin, sepsis and hepatic disease should be considered.

PHYSIOLOGIC JAUNDICE

The major problem with physiologic jaundice is that the burden of proof is on the physician to prove that it is physiologic. The only way of doing this is by ruling out all other disease. Physiologic jaundice is defined as an elevation of unconjugated bilirubin in the first week of life. It is a bilirubin that is from 2 to 12 mg% in full terms and 2 to 15 mg% in prematures, with no other demonstrable cause. In the premature infant it reaches its peak level at day 5 or 6 and in the full term at day 3 or 4. It is important to remember that an elevated bilirubin, greater than 5 to 10%, on the first day of life is never physiologic jaundice. A bilirubin greater than 12 mg% in a full term and greater than 15 mg% in the premature is probably not physiologic jaundice. A bilirubin less than 15 mg% in the premature and less than 12 mg% in the full term may be physiologic jaundice, but it also may not be. The major point is that in every infant with clinical jaundice the physician should seriously think of other causes of jaundice before diagnosing physiologic jaundice.

Physiologic jaundice should not be considered when there is clinical jaundice beyond the eighth day of life in the full term and beyond the 14th day of life in the premature. Also, if the direct bilirubin is greater than 1.5 mg%, physiologic jaundice should not be considered.

ABO AND RH INCOMPATIBILITY

With Rh incompatibility the mother may be sensitized by receiving mismatched blood or by abortion of an Rh+ fetus. However, usually she (Rh− mother) is sensitized by her first Rh+ fetus. The severity of the disease increases with each pregnancy involving an Rh+ fetus. In the first pregnancy the red blood cells from the Rh+ fetus go into the Rh− mother at the time of delivery. Fetal maternal transfusion occurs at most deliveries. The mother becomes sen-

tized to the Rh+ red blood lls and in the next pregnancy ie Rh+ fetus may become ightly jaundiced and require an xchange transfusion. With each iccessive Rh+ fetus the severity of ie disease increases. It is impor- int to remember that most Rh− others who have Rh+ fetuses nev- have problems with hemolytic isease. Why some mothers with H fetuses have hemolytic prob- ms whereas others do not is not nderstood.

Anti A and anti B antibodies are a t u r a l l y occurring antibodies. BO hemolytic disease is much less evere than Rh disease. ABO he- olytic disease may occur in the rst pregnancy since these anti- odies are naturally occurring. Us- ally the mother is O and the infant A or B. If a mother has one in- nt with ABO hemolytic disease ie risk of the disease becoming orse the next ABO incompatible regnancy is approximately 1/3, ie risk of it being the same sever- y is approximately 1/3, and the sk of it being less severe is approx- nately 1/3.

The management of a pregnancy omplicated by Rh sensitization is xtremely complex and should be andled by a perinatal obstetrician n a center that has an obstetrical ntensive care unit and a neonatal itensive care unit staffed by neo- atologists. The management of a regnancy following ABO hemolyt- c disease is no different than the anagement of a normal pregnan- y.

The prevention of Rh disease is n important topic. Rho Gam or nti D antibody administered to the nother after the first Rh+ pregnan- y or abortion (spontaneous or ther), will prevent most cases of Rh sensitization. If a delivery is ery traumatic with manipulation of he placenta, a larger amount of etal blood may cross into the mother, and consideration should be given for using a larger dose of Rho Gam. One of the more common causes of Rh sensitization and Rho Gam failure is failure to administer Rho Gam properly. A mother who is O Rh− and has an A Rh+ fetus with a positive direct Coombs is not necessarily a contraindication to Rho Gam. It is important to remember that the direct Coombs measures antibodies on the red blood cells but does not determine which antibody is present. That is, in the case described above, the positive direct Coombs may be due to the ABO incompatibility rather than the Rh incompatibility. It is important to do an anti Rh titer on the mother or baby. If the Rh titer is negative, then Rho Gam is still indicated. In addition, the positive direct Coombs could be due to some other unusual antibody present rather than anti D antibody.

FIGURE 6
Serum Levels of Indirect Bilirubin and Exchange Transfusion*

Birth Weight (gm)	Serum Bilirubin Level for Exchange Transfusion (mg/100 ml)	
	Normal Infants†	Abnormal Infants‡
<1,000	10.0	10.0§
1,001-1,250	13.0	10.0§
1,251-1,500	15.0	13.0
1,501-2,000	17.0	15.0
2,001-2,500	18.0	17.0
>2,500	20.0	18.0

*These guidelines have not been validated.
§There have been case reports of basal ganglion staining at levels considerably lower than 10 mg.
†Normal infants are defined for this purpose as having none of the problems listed below.
‡Abnormal infants have one or more of the following problems: a) perinatal asphyxia, b) prolonged hypoxemia, c) acidemia, d) persistent hypothermia, e) hypoalbuminemia, f) hemolysis, g) sepsis, h) hyperglycemia, i) elevated free fatty acids or presence of drugs which compete for bilirubin binding, j) signs of clinical or central nervous system deterioration.

REF: Standards and Recommendations for Hospital Care of Newborn Infants, American Academy of Pediatrics, p. 95, 1977.

THERAPY OF HYPERBILIRUBINEMIA

There are basically three modes of therapy: 1) exchange transfusion; 2) phototherapy; and 3) drugs to induce enzymes. Phenobarbital has been administered to mothers to induce glucuronyl transferase enzyme and decrease the incidence of jaundice. However, in this country the use of phenobarbital routinely in pregnant women cannot be recommended. The potential harmful effects of phenobarbital on the fetus are not known.

Figure 6 shows recently published guidelines for doing exchange

FIGURE 7
Phototherapy

I. Possible Harmful Effects:
- Are the breakdown products of bilirubin harmful
- Does it harm the eyes
- Loose stools
- Skin rashes
- Obscures the diagnosis
- Cannot assess the jaundice clinically
- Can turn skin tan color
- Can overheat infant—increase water requirement
- Possible other effects not yet known
- Late anemia may occur in infants with hemolytic disease
- Bronze baby syndrome
- Elevated direct bilirubin

II. Guidelines in Light Therapy:
- Etiology of jaundice must be evaluated
- Do not use light therapy prophylactically
- Use light therapy in infants in whom risk of hyperbilirubinema outweighs risks of light
- Infants with exchange indicated should not have transfusion delayed for trial with light therapy
- Light therapy should not be started until an abnormal rise in bilirubin has been demonstrated
- Check lamps regularly
- Eyes should be patched and corneal ulceration should be guarded against. Examine frequently for conjunctivitis
- Body temperature should be monitored closely
- Side effects: loose stools, rashes, priapism, change in activity
- Follow-up is essential
 - Rebound may occur when therapy is discontinued
 - Delayed severe anemia is common
- Do not use with elevated direct (conjugated) bilirubin

transfusions. Phototherapy might be instituted at a bilirubin concentration of 5 mg% less than the exchange level. It is most important to remember that these are guidelines. In all instances "bilirubin" refers to the indirect bilirubin level. The decision as to when to perform an exchange transfusion is very difficult. In a healthy full term infant at 3 days of life, an indirect bilirubin of 20 mg% is probably an adequate indication to perform an exchange transfusion. However, in a 1,000 gram critically ill infant on a respirator, a bilirubin of 10 mg% may be an indication for an exchange transfusion. Also, if the jaundice occurs very early in the first 24 hours of age, suggesting hemolytic disease, an exchange transfusion is performed earlier.

It is important to remember that *Figure 6* provides guidelines and not rules. At this time the best criteria for deciding whether or not to exchange a patient is the indirect bilirubin level and the clinical situation. The use of laboratory tests such as sephadex to predict the risk of kernicterus by measuring the "free" serum bilirubin level has not been proven effective. If tests such as these are used to increase one's suspicion of the possibility of kernicterus and to exchange a patient earlier, the test may be useful. However, if the tests are used to delay an exchange transfusion in a patient whom you otherwise would exchange, the test may be very dangerous.

Exchange transfusions are dangerous procedures. They should be performed only by pediatricians who do many exchange transfusions —not one or two per year. Exchange transfusions are associated with significant morbidity and mortality, especially when done by inexperienced personnel.

PHOTOTHERAPY

Phototherapy appears to work by breaking down bilirubin. However the breakdown products and the effects of these products are not well understood. *Figure 7* shows the possible harmful effects of phototherapy. They include possible eye damage, loose stools, skin rashes and tanning the skin. One of the most important side effects is that it may obscure the diagnosis. For example an infant with prolonged hyperbilirubinemia secondary to hypothyroidism will decrease his bilirubin level if put under phototherapy. However, the clinical signs of prolonged jaundice will not be available to the physician as a "red flag" that something is wrong to suggest the diagnosis of hypothyroidism. The heat from the phototherapy lights may overheat the infant and also may increase water requirements dramatically. If infants with hemolytic disease are not exchanged but treated with phototherapy, continued hemolysis may go on for many weeks of life and result in late anemia.

Phototherapy should be considered a drug and not be used unless it is indicated. It should not be used prophylactically to prevent jaundice. It should not be used routinely in full term infants. Full term infants with a bilirubin of 10 to 15 mg% probably are not an indication for the use of phototherapy. *Figure 7* shows some guidelines for the use of phototherapy. Remember, do no

use phototherapy without serious thought.

KERNICTERUS

Kernicterus is the yellow staining of the brain, particularly of the basal ganglia and hippocampus, secondary to deposits of indirect bilirubin in the brain. The early manifestations of kernicterus include lethargy, poor feeding, high pitched cry, vomiting and hypotonia. Late manifestations occurring after many weeks, months or years include irritability, hypertonia, opisthotonus, seizures, impaired mental function, deafness and movement disorders.

Indirect bilirubin is the bilirubin that deposits in the brain and causes kernicterus. In addition, in order to get across into the brain, it must be free indirect bilirubin not bound to albumin in the blood. Most of the bilirubin in the blood is bound to albumin. Only a very small percentage (less than .01%) is free bilirubin. The problem is that at this time there are no good tests clinically available for measuring free bilirubin. Many tests to evaluate free bilirubin or for assessing the saturation of serum bilirubin have been devised. These include HABA binding, salicylate saturation index, sephadex, red cell or mitochondrial bilirubin content, enzymatic determination of free bilirubin (peroxidase method) and fluorescent quenching method for measuring free bilirubin. However, none of these tests have been shown to be clinically useful in managing patients with jaundice.

Therefore, the physician must still use the indirect bilirubin level and the clinical situation to decide when to institute therapy for jaundice. It is not known what level of bilirubin is safe in different clinical situations. It is known that factors such as prematurity, acidosis, hypothermia, hypoalbuminemia, hypoglycemia, infection and certain drugs (sulfa, aspirin, valium, caffeine benzoate) increase the risk of kernicterus. However, what bilirubin is safe is not known. Premature infants with indirect bilirubin values no greater than 9 mg% have developed kernicterus.

SUMMARY

Neonatal jaundice is a common, yet potentially serious problem. An organized approach to the jaundice newborn as presented in this paper will prevent serious long-term complications associated with this disorder.

★
Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
Since 1899
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
1810 Broad Ripple Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indianapolis 46220
Northern Indiana Office: Douglas O. Sellon, Representative
120 LaSalle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332

Cigarette Smoking in Family Practice

JAMES R. BUECHLER, M.D.
Terre Haute

CIGARETTE SMOKING remains one of the major health hazards of our day. Approximately 35% of adults can be classified as smokers, i.e., they smoke more than 10 cigarettes per day. The health risks, particularly lung cancer,[1] have been dramatically presented in all media. There has been less public emphasis on other adverse health effects, especially cardiac, where the mortality for male smokers between the ages of 45-64 is 340% greater than for non-smokers. In general, age specific mortality rates are increased by 70% in smokers as compared to non-smokers.[2]

In an attempt to better define smoking habits of patients in a family practice setting and the reasons for why they do or do not smoke, some of the Union Hospital Family Practice Center patients were surveyed.

A survey of Union Hospital Family Practice Center patients indicated that 66% were non-smokers. Why? 27% were concerned with their health, 23% cited willpower and 22% said the habit is disgusting . . .

METHODS

For several weeks patients visiting our office were at random given a brief questionnaire of three items. The questions were:

- Do you smoke more than 10 cigarettes a day?
- Have you ever smoked more than 10 cigarettes a day for more than six months?

Think carefully before answering the next question.

- What is the single greatest reason why you do or do not smoke?

The author is Director, Family Practice Residency of Union Hospital, Terre Haute, and is a clinical associate professor of Family Medicine, Indiana University School of Medicine.

RESULTS

There were 146 completed questionnaires. Of that group, 81 (55%) were non-smokers and had never smoked, 15 (10%) were non-smokers who had been previous smokers, and 50 (34%) were smokers *(Table 1)*. Responses from individuals under 30 years of age were very similar and are also shown in *Table 1*.

Although the response to the last question was subjective in nature, the replies could be divided into various categories. *Tables 2 and 3* show the reasons for non-smoking by those who have never smoked and those who have been smokers in the past. *Table 4* shows the responses of those who are smokers.

DISCUSSION

Our figure of approximately 35% smokers both in the entire group and those under 30 years of age corresponds well to national averages and tends to confirm the thought that there is a slight resurgence of smoking by young people today!

The reasons given for non-smoking (*Tables 2 and 3*) were somewhat difficult to categorize because the respondents tended to elaborate and give more than one reason. As would be expected, health was the major reason listed and was by far the major reason why previous smokers had quit smoking.

Among those who have never smoked, health reasons, although important, were less numerous. Willpower is indicated in the category of "just don't." Examples of responses in this category were: "I just don't smoke," "Never have smoked at all," "I just never started."

A closely related and sometimes hard to differentiate category is that designated as "disgusting." The responses in this category were by far the most forceful: "I am an asthmatic, and I hate people who smoke. The smoke is terrible." "It's a dirty habit and not healthy." "It makes me ill."

TABLE 1

Smoking Habits of FPC Patients

	All Replies		Replies under 30 years old	
	# Responses	%	# Responses	%
Non-smokers (never)	81	55	38	60
Non-smokers (previous smokers)	15	10	2	3
Total Non-smokers	96	66	40	63
Total Smokers	50	34	23	37
TOTAL Responding	146		63	

TABLE 2

Reasons for non-smoking by people who have never smoked

	# Responses	% Responses
Health	25	27
Just don't	21	23
Disgusting	20	22
No enjoyment	8	9
Parents didn't	3	3
Other	14	15
	91	

TABLE 3

Reasons for non-smoking by people who have been previous smokers

	# Responses	% Responses
Health	6	46
Disgusting	1	8
Just don't	0	0
No enjoyment	2	15
Parents	0	0
Other	3	23

TABLE 4

Reasons for smoking

	# Responses	% Responses
Habit	30	50
"Nerves"	12	20
Enjoyment	7	12
Weight	5	8
Miscellaneous	6	10

It is interesting to note that, among the reasons for smoking (*Table 4*), enjoyment is only a minor factor; the largest number admit to a "habit" they are unable to control or "nerves," which is closely related to a "habit."

COMMENTS

Although there are many reasons for non-smoking, health reasons predominate. This attests to the effectiveness of publicity from the American Cancer Society and the Federal Government, among others. Many people simply don't want to smoke or find it offensive. This attitude seems to be one that could be fostered in young children well before the overwhelming peer pressures of adolescence that begin the smoking pattern of many.

From our results it appears that not many smokers do so with enjoyment as the major reason, but because they are unable to quit and are most likely truly addicted. This brings up the question of predisposing personality or even physical differences in smokers. Some studies regarding these questions provide conflicting results, and it appears further observations might be warranted.[3-6]

REFERENCES

1. Cancer Facts & Figures, *American Cancer Society*, p. 19, 1976.
2. Fram PS: A critical review of periodic health screening using specific screening criteria. *J Fam Pract*, 2:1, 29, 1975.
3. Simon WE: The personality of the cigarette smoker: Some empirical data. *Int J Addict*, 11:1, 81, 1976.
4. Pederson LL: A psychological & behavioral comparison of ex-smokers & smokers. *J Chronic Dis*, 29:431, 1976.
5. Reynolds C: Personality & behavioral correlates of cigarette smoking: One-year follow-up. *Psychol Rep*, 38:251, 1976.
6. Fisher JM: Sex differences in smoking dynamics. *J Health Soc Behav*, 17:156, 1976.

Dermatology

Clinical Notes

JERE D. GUIN, M.D.
Kokomo

The Source of Tinea Versicolor

TINEA VERSICOLOR is a "fungus" disease which is cosmetically annoying and occasionally pruritic. The organism seen in skin scrapings, Malassezia furfur, appears to be identical with Pityrosporum orbiculare. The latter organism is closely related to, if not identical with, P. ovale, the bottle bacillus long associated with dandruff. Now, Faergemann and Fredricksson[1] have produced a tinea versicolor-like disease with P. orbiculare in both cured patients and laboratory animals. Susceptibility to the disease is probably caused by a reduction in leukocyte migratory inhibitory factor to P. orbiculare.[2] Otherwise, the cell mediated immune system in these patients seems normal.

Treatment in our climate is not difficult since selenium sulfide and many fungicides are effective. Minimum inhibitory concentration studies also show P. orbiculare to the susceptible to dipyrithione, used to treat dandruff.[1] Patients are frequently disappointed, however, when the pigmentary change seems unaltered or even worse following treatment. They should be told in advance that treatment is successful when lesions are no longer scaly. Discoloration improves in time if the condition remains inactive. For the best cosmetic results, many patients must be treated prophylactically every 2 to 3 months to prevent recurrences.

REFERENCES

1. Faergemann J, Fredricksson T: Tinea versicolor—Some new aspects. Scientific Exhibit, *Amer Acad Dermatol,* San Francisco, Dec 4-6, 1978.
2. Sohnle PG, Collins-Lech C: Cell-mediated immunity to Pityrosporum orbiculare in tinea versicolor. *J Clin Invest,* 62: 45-53, July 1978.

Combined Therapy for Candidiasis

CANDIDIASIS of the skin and vaginal areas can be a chronic problem, particularly for those on oral contraceptives and/or antibiotics. It may be possible, however, to more effectively treat this condition by using a combined local and oral approach, according to a group at Michigan State University. Miles, *et al* reported in the JAMA that 100% of 18- to 20-year-old females with vaginal candidiasis have a reservoir in the intestinal tract. Conversely, those with positive stool cultures also had a positive vaginal culture 98% of the time. They present a cogent argument for adding oral anti-candidal therapy to our treatment program for vaginal candidiasis in an attempt to eradicate the reservoir in the gut.

Theoretically, such treatment also could be useful in managing some patients with cutaneous candidiasis. In my experience, therapeutic failures with candidal intertrigo or diaper dermatitis are usually due to the failure to remove moisture from the environment. Should this approach fail or should a recurrent problem develop, it would be wise to look for and perhaps treat the intestinal reservoir.

REFERENCE

Miles MR, Olsen L, Rogers A: Recurrent vaginal candidiasis. Importance of an intestinal reservoir. *JAMA,* 238:1836-37, Oct 24, 1977.

BOOK REVIEWS



In Our Professional Opinion . . .

The Primacy of Clinical Judgment Over Moral Choice

Wendy Carlton, Assistant Professor of Sociology at the University of Notre Dame. Copyright 1978. University of Notre Dame Press, Notre Dame, Ind. 46556. 207 pages, $9.95.

This book is well worth serious reading and study by all those with an M.D. degree, in particular, as well as by sociologists. The main thrust of the author is the attempt to determine what happens to the personality and point-of-view of a medical student as he progresses through the combination of medical school and university hospital. She takes pains to conceal the identity of all concerned, especially the particular university hospital where she was accepted as a sociologist engaged in research and was allowed to take part in and witness all medical phases (very little surgical) of the students' progress, including a bit of psychiatry. She makes use of case histories and conversations with students; of reports of conversations between students and attendings, students and residents, students and internes, students and nurses, etc., of explicit descriptions of the hierarchies involved in such a hospital situation, both general medical and psychiatric; and to a limited extent, of readings from sociological literature, chiefly in the form of well prepared notes. To insure proper collation with the said literature, she limited her research to *male* medical students, because "the classic studies of medical students were concerned only with male students. I did not want variations from those initial observations attributed to the use of female students as informants." This statement is typical of her point-of-view and style of writing. It confirms also her stated method of research as "participant observation".

Most of her conclusions are presented logically, and only rarely is there a little confusion or begging the question, as for instance the introduction of deontology and teleology in discussing actions having both good and bad consequences. Occasionally, we must struggle with a term like "internalize" when what she means is "assimilate".

Her outline of analysis is based on three perspectives: the clinical, the legal, and the moral. She shows how the order of importance changes in the student's mind from moral, clinical, legal on entry to medical school, to clinical, legal, moral as he becomes a physician. "Hospital administrators invoke the legal, the clinical, and then the moral . . . Lay persons use the moral perspective and depend on professionals to provide the clinical and legal perspectives, though they may use information from the media" for the latter.

In her conclusion she presents some very interesting ideas as to possibilities in delegation of certain functions to paramedical personnel, suggesting for instance the "peer counselor" to check on the nonclinical needs of patients, both informational and emotional. A prototype of this is well known in the "counseling" of mastectomy patients by other women who have experienced it. Finally, she mentions the "double bind". "On the one hand, the public complains that physicians have too much autonomy and power; on the other hand, they rebuke them for their unwillingness to assume responsibility for the problems the public would gladly dump at their feet." (Such as alcoholism, deviance, promiscuity.)—All in all, a worthwhile study. It will help you to "know thyself".

A. W. CAVINS, M.D.
Gynecologist
Terre Haute

BOOK REVIEWS

Current Medical Diagnosis and Treatment

Marcus A. Krupp, M.D., Milton A. Chatton, M.D., with associate authors. Copyright 1979. Lange Medical Publications, Los Altos, Calif. 94022. 1,129 pages, $18.00.

This soft cover, well printed book, which has been revised and reprinted annually since 1962, appears in Spanish, Italian, Portugese, German, Japanese editions, and translations in Greek, Dutch and French are in preparation. To those who are familiar with it, this widespread popularity is understandable.

In their preface, the authors state their objective of providing the practicing physician with a useful desk reference on widely accepted technics currently available for medical diagnosis and treatment. Modestly, they state that production of a mini-textbook of medicine is not their aim.

However, this reviewer finds little in the standard comprehensive medical texts that is not given in a simpler, more condensed form in this volume. The busy practitioner who needs quick information on most any medical problem he confronts will find it in a succinct and authoritative form here.

This is not a pharmacology text, but one finds excellent descriptions of the drugs that are used in treatment of the various disorders discussed, information enough to make for precision in treatment of the kind that should keep one out of trouble. The section on antibiotics I found of particular value in choosing the right drug in the right dosage or the right condition. This would be expected of an associate author of the caliber of Ernest Jawetz. There is a concise presentation also of the drugs used in cancer chemotherapy—a never, never land for most non-oncologists. The author, Dr. Sidney Salman, wisely suggests that these highly toxic agents be used by, or at least in consultation with, experts in the cancer field; but, at least, the practicing physician can learn their names and indications for their use.

It is surprising to find such helpful chapters on newer concepts in immunology and on the relation and importance of genetics to so many disorders with which one must deal.

I can think of no textbook now available which so compactly encompasses so much usable medical knowledge.

PAUL S. RHOADS, M.D.
Internist
Richmond

INDIANA MEDICAL BUREAU
1010 East 86th St.—72 Winterton
Indianapolis 46240
844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service

CME QUIZ

Radiology of Pleural Disease

CONTINUED FROM PAGES 339-345

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: Indiana University School of Medicine, Division of Postgraduate and Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46202.

Answer the following questions: More than one answer may be correct.

1. In the presence of pleural effusion, the lower lobes are most readily evaluated radiographically by:
 a. Tapping the chest dry.
 b. Ultrasound.
 c. A prone cross table lateral view.
 d. Oblique views.
2. Ultrasound is useful in:
 a. Demonstrating the fluid nature of a chest density.
 b. Determining the level of the diaphragm in the presence of fluid.
 c. Localizing loculated pleural effusion.
3. The most important factor in detecting an air-fluid level in the chest is:
 a. A decubitus view.
 b. A low killivolt (KV) film.
 c. A horizontal x-ray beam.
4. Pleural plaques:
 a. Strongly suggest past exposure to asbestos.
 b. Occur in the apices and costophrenic sinuses.
 c. Are best evaluated with tangential views.

The following are answers to the CME quizzes that appeared in the February, March and April issues of THE JOURNAL. Effective immediately, the answers to each month's CME quiz will be published in the following month's issue of THE JOURNAL.

February: "Hypoglycemia in the Diabetic," by Charles M. Clark, M.D.

1. False	6. True	11. True
2. True	7. True	12. True
3. False	8. False	13. True
4. True	9. True	14. False
5. True	10. True	15. True

March: "Facial Paralysis: Diagnosis & Treatment," by Laverne B. Tubergen, M.D.

1. False	4. False
2. True	5. True
3. False	6. True

April: "Exercise-Induced Asthma," by L. Craig Miller, M.D.

1. False	4. All of the above
2. False	5. a. True
3. True	b. True
	c. True
	d. True
	e. False
	6. True

Complete this form to obtain verification for one hour of Category 1 AMA CME credit.

Answer sheet for Quiz: (. . . Pleural Disease)

1. a b c d
2. a b c
3. a b c
4. a b c

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in the next issue of THE JOURNAL for my information.

To be eligible for credit for this month's quiz, send your completed, signed application before June 10, 1979, to the address appearing at the top of this page.

ISMA Membership Roll

The Indiana State Medical Association welcomes the following new members:

Bartholomew County:
Cherdron, Darryl R., Columbus
Pathology

Delaware-Blackford County:
Hunter, Robert E., Muncie
Family Practice

Dubois County:
Bretz, Robert David, Huntingburg
Radiology

Elkhart County:
Dubynsky, Orest G., Elkhart
Pediatrics

Floyd County:
Best, Michael M., Louisville, KY
Surgery, General

Fort Wayne-Allen County:
Bhat, Ramesh H., Fort Wayne
Obstetrics and Gynecology

King, Robert M., Fort Wayne
Cardiovascular Diseases

Maitra, Ajay K., Fort Wayne
Gynecology

Menon, Mohan M., Fort Wayne
Pediatrics

Ranasinghe, Sisira, Fort Wayne
Pathology

Stafford, Joseph A., Fort Wayne
Internal Medicine

Stiles, Reginald B., Fort Wayne
Family Practice

Hancock County:
Trevor T. Lloyd-Jones
Family Practice

Howard County:
Peelle, William W., Kokomo
Surgery, Urological

Yun, Chang H., Kokomo
Internal Medicine

Jefferson County:
Taustine, Lloyd R., Madison
Ophthalmology

Lake County:
Clardy, George T., Gary
Family Practice

Desai, Varsha A., Munster
Obstetrics and Gynecology

Koo, Young S., Hammond
Family Practice

Love, William T., Gary
Psychiatry

Ramakrishnan, Vimala, Merrillville
Obstetrics and Gynecology

Vallejos, Constante F., Munster
Family Practice

St. Joseph County:
Norman, Maurice J., South Bend
Cardiovascular Diseases

Shelby County:
Haehl, William D., Shelbyville
Family Practice

Peters, James L., Shelbyville
Family Practice

Vanderburgh County:
Ha, Sang-Tai, Newburgh
Psychiatry, Child

Wayne-Union County:
Hirons, W. T., Richmond
Otorhinolaryngology

Jetmore, David L., Richmond
Otorhinolaryngology

BEFORE YOU BUY OR LEASE, CONSULT WITH DAVE WAITE LEASING

At Dave Waite Leasing you will find all kinds of new automobiles and trucks on display for immediate delivery.

With rising automobile costs, before you buy, you must consider leasing whether it is for business or personal use. Consider that you can lease:

Gas-saving Compacts as little as **$110*** Sporty Intermediates as little as **$130*** Lease a Luxury car as little as **$160***

*per month, for 36 month, (incl. tax)

Before you buy or lease, consult with us. Dave Waite Leasing is the leader and specialist.

Dave Waite Leasing

1040 N. Meridian/634-5046 • 5350 N. Keystone/253-1501
3421 U.S. 31 South/788-1571 • 4809 W. 38th/298-7680

NEWS NOTES

'Speak Up for Children'

The International Year of the Child, 1979, is getting a boost from the Indiana Chapter of the American Academy of Pediatrics, chaired by Dr. Robert Hannemann of Lafayette. The Indiana pediatricians represent one of the organizations comprising the Governor's Committee for IYC that is offering speakers to the general public to address certain child-related health concerns.

Besides speaking engagements, Dr. Hannemann explained that the Indiana chapter of the AAP has produced and distributed a series of five-minute radio tapes bearing the title of the national theme, "Speak Up for Children." The tapes deal with accident prevention, health education, immunization and nutrition.

Scientific Writing Course

ISMA members are invited to attend a scientific writing course from June 18 to 22 at Steamboat Springs, Colorado. The course is under the directorship of Dr. R. Dale Liechty, Professor of Surgery at the University of Colorado. Dr. King will again be the visiting professor. To enroll write Dr. Liechty at 4200 E. 9th St., Denver, Colorado 80226.

Here and There . . .

. . . **Dr. Joseph M. Black** of Seymour has been re-elected chairman of the board of directors, Blue Shield of Indiana. He is a past president of the ISMA.

. . . **Dr. Vincent J. Santare** of Munster, also a past president of the ISMA, has been named medical staff president-elect at St. Catherine Hospital, East Chicago.

. . . **Dr. C. Richard Bowers** of Anderson has been named "Citizen of the Year" by Elks Lodge 209 for his "outstanding service to the community, profession and country."

. . . **Dr. Quentin B. Emerson,** who has a family practice in Fort Branch, north of Evansville, has volunteered to author a column for the FORT BRANCH TIMES. The column, which will answer medical questions from readers, will be called "Dear Dr. Emerson."

. . . **Dr. Philip B. Kinman** of Vincennes has been inducted as a Fellow of the American Academy of Orthopaedic Surgeons.

. . . **Dr. Jean Perrin** of Carmel has been appointed Hamilton County health officer.

. . . **Dr. Robert W. Briggs** of Indianapolis was among national recipients of the newly created Whitney M. Young Jr. Service Award for outstanding efforts in scouting. A long-time BSA worker, he was cited for his leadership in developing the Boy Scout Rural-Urban Field Service.

CME Congresses Slated

The American Medical Society of Vienna is offering a 1979 program of Seminar Congresses for Continued Education. The program includes 130 seminars in various medical fields. A calendar of these Congresses is available by writing World View Travel, Ltd., 641 Lexington Ave., New York City 10022.

June 7: Duke's Day

The annual Duke's Day outing is scheduled for June 7. It will be held at Pine Valley Country Club in Fort Wayne. The affair, which is enjoying its 10th year, is devoted to raising a scholarship fund for paramedical and paradental students. Physicians, dentists, pharmacists and pharmaceutical representatives join together in sponsoring the event. Since 1972, 244 students have received scholarships totalling $62,750.

ASSOCIATE MEDICAL DIRECTOR

One of Chicagoland's largest manufacturing plants is seeking an Associate Medical Director.

The applicant must either be licensed to practice medicine in Indiana or eligible for such license. This plant's Medical Department normally has five physicians participating in a comprehensive program of occupational medicine in a well equipped and modern medical facility.

This department includes a fully staffed complex with an X-ray unit, laboratory, clinic and hospital facilities. It also includes an Occupational Hygiene Division having a comprehensive program for control of environmental exposure, as well as a full range of medical activities including traumatic, preplacement and consultive services.

An outstanding no-cost liberal benefits package is included. Salary negotiable.

Normal working hours are 8AM to 5PM. A wide variety of desirable locations in which to live are available.

Qualified applicants will be invited to this plant to inspect the facilities and confer with the Medical Director. Reply in confidence to:

Mr. Ross Ellis
Dept. 7-500
3210 Walting Street
East Chicago, IN 46312
Equal Opportunity Employer M/F

NEWS NOTES

Diplomates

The following ISMA members have been named diplomates of the American Board of Family Practice:
Gordon T. Robbins, M.D., Zionsville;
John G. Kolettis, M.D., Merrillville;
Gordon D. Welk, M.D., Rossville;
Maurice D. Sixbey, M.D., Denver;
John J. Farrell, M.D., Greenfield;
Ray A. Haas, M.D., Greenfield;
Gary C. Sharp, M.D., Greenfield;
Stephen C. Mayers, M.D., Flora;
Edward L. Langston, M.D., Flora;
Drew A. Kovach, M.D., Argos;
Howard C. Jackson, M.D., Madison;
Richard G. Spindler, M.D., LaGrange;
Marion L. Hagan, M.D., French Lick;
J. Franklin Swaim, M.D., Rockville;
Frederick R. Ridge, M.D., Corydon;
Douglas E. Sawyer, M.D., Warsaw;
Terry L. Alley, M.D., South Bend;
Owen H. Lucas, M.D., Chesterton;
James E. Reidy, M.D., Granger;
Ambrose M. Price, M.D., Anderson;
Gerald E. Kasting, M.D., Bedford;
Lindley L. Gammell, M.D., Columbus.

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

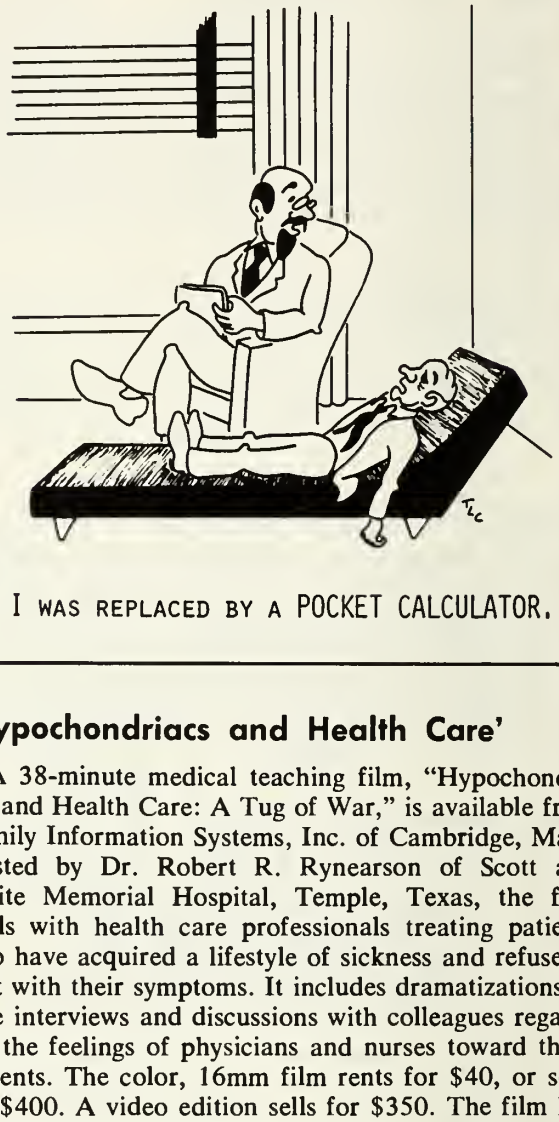
Immediate delivery on many 1979 models

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594



I WAS REPLACED BY A POCKET CALCULATOR.

'Hypochondriacs and Health Care'

A 38-minute medical teaching film, "Hypochondriacs and Health Care: A Tug of War," is available from Family Information Systems, Inc. of Cambridge, Mass. Hosted by Dr. Robert R. Rynearson of Scott and White Memorial Hospital, Temple, Texas, the film deals with health care professionals treating patients who have acquired a lifestyle of sickness and refuse to part with their symptoms. It includes dramatizations of case interviews and discussions with colleagues regarding the feelings of physicians and nurses toward these patients. The color, 16mm film rents for $40, or sells for $400. A video edition sells for $350. The film has been certified for three credit hours in Category 1 of the AMA's Physicians' Recognition Award. Write Workshop Films, 4 Longfellow Road, Cambridge, Mass. 02138.

Second HMO Federally Qualified

Indiana's second Health Maintenance Organization (HMO) has been notified that it is now federally qualified. Operated by the Caylor-Nickel Medical Center in Bluffton for the center's 700 employees and their families, it will now open its services to the general public through employers and unions. The Caylor-Nickel Clinic is a 50-physician, multi-specialty group practice adjacent to a 200-bed hospital.

The state's first federally approved HMO is Metro-Health Plan, Indianapolis.

NEWS NOTES



ISN'T THAT THE GALL BLADDER FROM 302?

ail Accredited by AMA

The St. Joseph County Jail, operated by Sheriff alph DeMeyer of South Bend, has been granted a full wo-year accreditation by the AMA, according to Michael J. Huntley, ISMA jail project director. Thirty ails in 15 states are currently accredited by the AMA; even of those are in Indiana.

Under the Jail Health Project, state medical associaons work with the AMA and the jails to develop an ccreditation program certifying that minimum health nd medical standards are being met.

Dr. Fischer Attends NAS Confab

Dr. A. Alan Fischer, Indiana's only family physician ember of the Institute of Medicine, National Acadmy of Sciences, participated last month in that organiation's invitational conference on "The Provision of Mental Health Services in Primary Care Settings." The onference was held in Washington, D.C. Dr. Fischer is rofessor and chairman of the Department of Family Medicine, I.U. School of Medicine.

Richter Professorship Filled

Dr. James E. Simmons, director of Child Psychiatry ervices for Indiana University School of Medicine, as been appointed to a new professorship, the Arthur B. Richter Professorship of Child Psychiatry. The proessorship will be supported partially by income from an endowment fund opened recently through a genrous gift from Dr. Arthur B. Richter, a 1931 graduate of the school.

Federal Regs on Sterilizations

For Medicaid provider physicians to be reimbursed for sterilizations and hysterectomies, the Indiana Department of Public Welfare advises that, since March 8 of this year, such procedures must comply with federal rules and regulations, published in the Federal Register, Vol. 43, No. 217, Nov. 8, 1978.

Consent forms, pertinent information pamphlets and copies of the Federal Register are available from Departments of Public Welfare at the county level.

'Good Sam' Physician

Dr. Wayne Richmond, 54, a Columbus specialist in occupational medicine, has been presented the annual "Good Sam" award by Indiana Health Careers, Inc. of Indianapolis.

Dr. Richmond, medical director of the Cummins Engine Company of Columbus, was cited for his "outstanding contribution to the development of health manpower in Indiana." He is a member of the Bartholomew-Brown County Medical Society.

HELP FOR THE CONGENITALLY HANDICAPPED CHILD It wasn't so long ago that congenitally handicapped children were allowed to reach school age or even later before being fitted with a prosthesis. In recent years, experience has shown that fitting at an earlier age produces more effective results—both mentally as well as physically. HANGER provides individually designed prostheses to give aid to the congenitally handicapped child. Children with "HANGER PROSTHESES" can live narmal lives. Using their HANGER appliances they exercise freely, ride bicycles, roller skate, play basketball, tennis, and engage in most of the activities like other growing children. These activities enable the child to became self-relient. Each HANGER prasthesis follows much the same design as thase for the adult, but utilizes specially develaped camponents of appropriate size, thus praviding a smoather tronsition as the child grows inta adulthaad. HANGER also provides devices and techniques for the initial fitting af infants and problem cases. Training of children in the use of their prasthesis is highly desirable, even though children present some problems not seen in adults. Since the attention spon of af young children is short, extreme patience is required. Some handicaps make an ideal gait-pattern difficult if not virtually impassible to achieve. It shauld be noted that complete caaperatian af the parent is necessary regardless of the experience and ability of the therapist. (Often the parents pass an a sense of guilt that is completely unfaunded as there are na known preventive methads ta combat the problem of a cangenital handicap.)

Hanger PROSTHESES

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807

PHYSICIANS' DIRECTORY

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurologicol Surgery

1815 North Capitol Avenue Indionopolis 46202

By oppointment only Phone 317-353-6800

BIO MEDICAL LABORATORY
5506 East 16th St., Suite 24
Indionopolis 46218
Bio-Feedbock Troining for Migroine ond Tension Headoche
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

OPHTHALMIC PLASTIC SURGERY

Robert D. Deitch, M.D., F.A.C.S.

Fellow of the American Association of Ophthalmic Plastic and Reconstructive Surgery

St. Francis Medical Arts Building
1500 Albany Street Suite 801
Beech Grove, Indiana 46107

PHONE ANSWERED 24 HOURS (317) 783-6187

INTERNAL MEDICINE

Offices for the doctors listed below are located at 3130 N. Meridian St., Indianapolis 46208; the switchboard number is 317-927-1221.

MERIDIAN MEDICAL GROUP

CARDIOLOGY
Richard M. Nay, M.D.
Warren E. Coggeshall, M.D.
Richard R. Schumacher, M.D.
William C. Elliott, M.D.

HEMATOLOGY—ONCOLOGY
Laurence H. Bates, M.D.
William M. Dugon, M.D.
James E. Schroeder, M.D.
Frank A. Warkman, M.D.
Deborah S. Provisor, M.D.
Pediatrics

METABOLISM AND ENDOCRINOLOGY
William M. Holland, M.D.

GASTROENTEROLOGY
Robert D. Pickett, M.D.
B. T. Maxam, M.D.
Lee G. Jordan, M.D.
Mortin P. Meisenheimer, M.D.

INTERNAL MEDICINE
Hunter A. Soper, M.D.
Douglas H. White, Jr., M.D.
Michael B. DuBois, M.D.
Nephrology
Michael P. Bubb, M.D.
Robert L. Iverson, Jr., M.D.
Critical Core
Michael Zeckel, M.D.
Infectious Diseases

INFECTIOUS DISEASES
Thomas G. Slama, M.D.

NEUROLOGY
Normon W. Oestrike, M.D.
Charles Rehn, M.D.

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Ahearn, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegeman, M.D.
Douglas F. Johnstone, M.D.
LeRoy H. King, Jr., M.D., FACP

2020 W. B6th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capitol, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

PHYSICIANS' DIRECTORY

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
PAUL M. FLANAGAN, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

DAVID L. PHILLIPS, M.D.
JOHN J. SAALWAECHTER, M.D.
BEN H. PARK, M.D.

Individualized Treatment for Alcoholism



1711 Lafayette Avenue
Lebanon, Indiana 46052

(317) 482-3711

HAND SURGERY

By appointment — Phone 317-783-1319

VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.
Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery

3530 S. Keystone, Suite 305 — Indianapolis 46227

CARDIOLOGY

WILLIAM K. NASSER, M.D.
MICHAEL L. SMITH, M.D.
CASS A. PINKERTON, M.D.

Cardiology and cardiac catheterization

8402 Harcourt Road, Room 413 — Indianapolis 46260
St. Vincent's Professional Building — (317) 257-9316
Physicion Referral Only

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.

Certified: American Board of Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons
Specializing in Colon and Rectal Surgery

214 Sherland Building
105 East Jefferson Blvd. — South Bend, Ind. 46601

PSYCHIATRY

GORDON T. BROWN, M.D.

Diplomate, American Board of Psychiatry and Neurology
Adult and Adolescent
Psychotheropy, Consultation, Evoluation

Tel: (317) 923-3269
3266 North Meridian Street — Indionapolis 46208

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

OBITUARIES

Bernard B. Rosenblatt, M.D.



Dr. Rosenblatt, 68, a former trustee of the Indiana State Medical Association, died March 27 at Welborn Memorial Baptist Hospital, Evansville. He had been on the staff at Welborn since 1952.

He was a graduate of the University of West Virginia School of Medicine and the University of Chicago Medical School.

Dr. Rosenblatt was a member of the American Academy of Family Practice and the American College of Emergency Physicians. He was a past treasurer of the Vanderburgh County Medical Society, a past president of the First Medical District, and a past president of the Welborn Hospital medical staff.

Ray W. Shanks, M.D.

Dr. Shanks, 80, a retired Noblesville physician, died March 8 at his home in Cape Coral, Fla.

A 1925 graduate of the Indiana University School of Medicine, he began his practice in Noblesville the following year and remained there until he retired in 1971.

Dr. Shanks was a former president of the Hamilton County Medical Society and had been a senior member of the ISMA since 1969.

William B. Challman, M.D.

Dr. Challman, 70, an Evansville physician, died March 19 at Deaconess Hospital, Evansville.

He was a 1932 graduate of the Indiana University School of Medicine. He had practiced in Mt. Vernon from 1932 until 1966, when he moved to Evansville. He was a flight surgeon during World War II, serving in China, Burma and India.

Dr. Challman, a former president of the Deaconess Hospital medical staff, served as medical director for General Electric in Mt. Vernon for 15 years. He served as an AMA alternate delegate from 1961 until 1965.

Edward L. Heckaman, M.D.

Dr. Heckaman, 46, a Richmond general practitioner, died March 14 at Reid Memorial Hospital, Richmond.

He was a 1958 graduate of the Indiana University School of Medicine. He served in the Army Medical Corps during part of the Vietnam War.

Dr. Heckaman had been a staff physician at Richmond State Hospital since 1970.

A. Ricks Madtson, M.D.

Dr. Madtson, 64, an Indianapolis general surgeon, died March 10 in Methodist Hospital.

A native of Ottawa, Kansas, he received his medical degree from the University of Kansas in 1942. He then moved to Indianapolis where he practiced more than 30 years.

Dr. Madtson was a member of the American College of Surgeons.



McClain Car Leasing, Inc.

1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

PHYSICIAN WANTED: Residence-trained, board-certified Family Physician to join well established four-man family practice group. Spacious office building across the street from well equipped hospital. Small midwest town in proximity to Indianapolis and Chicago. If interested, please reply to Kenneth J. Ahler, M.D., 1103 E. Grace St., Rensselaer, Ind. 47978.

FOR SALE: New deluxe examining table. Stainless steel platform, hide-away stirrups, grounded electrical outlet. Complete with new hylercator. Must sell due to terminal illness. Tel: (219) 474-6191 or write L. E. Kresler, M.D., 326 E. Holley Dr., Kentland, Ind. 47951.

FOR RENT July 1, 1979-July 1, 1980. Large 6-bedroom home on acreage; 3 full baths, 2-car garage, finished basement, study, screened porch, stables. Pike Township schools. Tel: (317) 873-4968.

WANTED: Two Family Practice Physicians need man to work as independent with a coverage system. Office across from modern hospital in northwest Indiana. Rich farming community. Net $50,000-$75,000 first year. Canadians welcome. Send resume to Robert W. Greene, M.D., 919 East Grace St., Rensselaer, Ind. 47978. Tel: (219) 866-5311.

HEALTH SERVICE PHYSICIAN—GP, FP, or INTERNIST to share out-patient care and treatment for 6,000+ students on the attractive Midwest campus of South Dakota State University. Exceptional staff and facilities for student care. Excellent hours. Free weekends. Flexible contract: 9-12 months. Must be interested in providing general primary medical care for college-age population. Very competitive salary with excellent fringe benefits. Some experience in adolescent or college practice is beneficial but not required. Applications accepted through June 1, 1979, or until suitable applicant is found. Send resume and two references or call collect James O. Pedersen, Dean of Student Services, South Dakota State University, Brookings, S.D. 57007, (605) 688-4121. The University is an Affirmative Action/Equal Opportunity Employer (Female/Male).

AVAILABLE IMMEDIATELY—A Physician's Assistant with two years experience seeking a position with a family or general practitioner. Resume and credentials available upon request to Mr. Robert L. Dougherty, 332 S. 20th St., Terre Haute, Ind. 47803.

USED MEDICAL EQUIPMENT and leftover supplies available. Logansport, Ind. Tel: (219) 753-4792.

CHICAGO AREA EMERGENCY DEPARTMENT DIRECTORSHIP. Progressive 250-bed hospital in community situated outside congested metropolitan area. Emergency Medicine experience and ACLS certificate, or comparable proficiency level required. Excellent minimum guarantee with directorship bonus, flexible rotations, and superb malpractice program. To inquire, call Bill Salmo at 1-800-325-3982, toll free.

OPPORTUNITIES FOR PHYSICIANS—There are current openings among the Indiana State Hospitals at various locations throughout the State for psychiatrists and physicians of other specialties, at most experience levels. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, Ky. 42071 or call (collect) (502) 753-9772. Forrest is retained by the Indiana Department of Mental Health.

CHICAGO AREA EMERGENCY MEDICINE PRACTICE. Progressive 250-bed hospital in community situated outside congested metropolitan area. ACLS certificate or comparable proficiency level required. Excellent minimum guarantee, flexible rotations, and superb malpractice program. For details, call Bill Salmo at 1-800-325-3982, toll free.

FAMILY PRACTITIONER OR INTERNIST full time for 60-bed comprehensive alcoholism treatment center with plans for expansion to 100+ beds and expanded outpatient services. Will work closely with and share coverage with three other full time physicians, and be responsible for initial medical evaluation, detoxification, treatment of medical problems and complications. Opportunity for involvement in teaching of medical students, residents, physicians and other health professionals. SALARY NEGOTIABLE ($50,000+) and excellent fringe benefits, including 4 weeks vacation, paid CME, paid health, disability and liability insurance. QUALIFICATIONS: M.D. with additional training and experience in Family Practice or Internal Medicine, sincere interest in treating alcoholics and Indiana Medical License, Board Certification and previous experience in Alcoholism Treatment preferred. CONTACT: Gerald P. Johnston, M.D., Medical Director, Fairbanks Hospital, Indianapolis, Ind. 46202. Tel: (317) 638-1574.



ADVERTISERS IN THIS ISSUE

May 1979 Vol. 72 No. 5

Americana Healthcare Center 319
Anacomp 303
Beltone Electronics Corp. 314
Blue Cross-Blue Shield 305
Brown Pharmaceutical Co., Inc. 323
Burroughs-Wellcome Co. 308, 330
Commercial Announcements 373
Dave Waite Leasing 366
Hanger Prostheses 369
Hempel Financial Corp. 301
Immke Circle Leasing, Inc. 368
Indiana Assn. of Certified Public Accountants 315
Indiana Medical Bureau 364
Lilly, Eli and Company 337
McClain Car Leasing, Inc. 372
Mead Johnson Pharmaceutical Div. 309
Medical Protective Co. 359
Merck, Sharp & Dohme 374
Merrell-National, Inc. ..310, 311, 312, 326, 327
Morris Plan 326
P&SLI 352
Pharmaceutical Manufacturers Assn. 316, 317
Physicians' Directory 370
Porsche + Audi 313
Professional Careers Institute 331
Roche Laboratories Covers, 307
Smith, Kline & French 329
Townsend, J. Russell and Associates 335
Upjohn Company 328
U.S. Air Force 338
Warner/Chilcott 348

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

June 1979 • Vol. 72 • No. 6

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION



PERFORMANCE. PROVEN EFFECTIVENESS WITHIN A WIDE SAFETY MARGIN.



While Roche Laboratories already knows more about the performance of Librium than anyone else, we keep on learning every day.

For example, the highly favorable benefits-to-risk ratio of Librium is a well-documented matter of record.

And, of course, the specific calming action of Librium has been demonstrated in millions of patients around the world. In a large number of these patients, Librium was used concomitantly with other primary medications.

Proven performance within a wide safety margin. Basically, that's what Librium is all about.

LIBRIUM® Ⓡ IV

chlordiazepoxide HCl/Roche

THE ANXIETY-SPECIFIC

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritab® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

ROCHE

Roche Products Inc.
Manati, Puerto Rico 00701

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis

Happy Birthday, Dr. Goethe Link

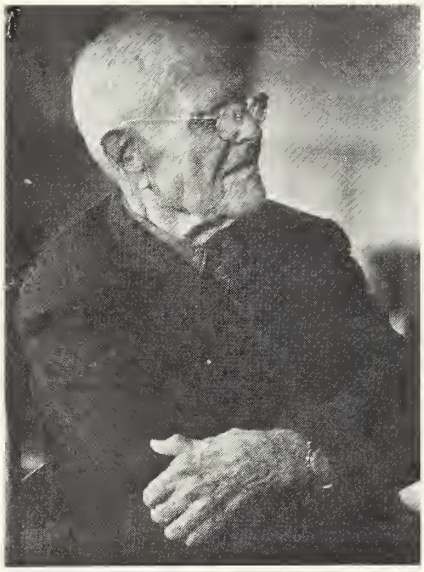


PHOTO BY ED LACEY, JR.

MAY 20, 1979 was the 100th birthday of Dr. Goethe Link. The purpose of this column is to deliver a slightly belated birthday greeting to Dr. Link from his ISMA friends and colleagues throughout the state.

When Goethe Link was born, in 1879, the ISMA (then known as the Indiana State Medical Society) was in its 29th year of existence. Dr. Ben Newland of Bedford was president of the organization (Museum Notes, 69:554, 1976), and there were approximately 1,200 members. Link's father, William H., later, but not then an ISMA member, was a high school principal, a student of German engrossed with Faust, and hence it was that the future Dr. Link was named in honor of Goethe. William Link gave up his career in education in favor of medicine, earning his M.D. degree from the Medical College of Ohio in 1884. He did postgraduate work at the Philadelphia Polyclinic in 1890; he studied surgery with Dr. Joseph Price in 1893, and later with Dr. T. A. Emmet at the Women's Hospital in New York. This experience would over-flow into the next generation.

It was Dr. W. H. Link who was the inspiration and guiding influence in his son's career. Goethe Link had a college education before entering medical school, this at a time when a high school education was enough to satisfy entrance requirements. He graduated from the Central College of Physicians and Surgeons in 1902 (where his father was "Demonstrator of Operations on the Cadaver"). Dr. W. H. Link impressed upon his son the importance of a knowledge of anatomy, advice which was duly heeded, and which Dr. Goethe Link admits was a key factor to success in his own remarkable career in thyroid surgery.

Dr. Goethe Link shared an office with his father during his early years of practice. This was located at 743 Virginia Avenue in Indianapolis; a horse and buggy was their principal mode of transportation. Like his father, Dr. Goethe Link also taught anatomy at the Central College of Physicians and Surgeons. His experience here in demonstrating the detailed anatomy of the head and neck also provided the delicate surgical training which would put him in good stead in subsequent years. At this early date, however, it was not the thyroid gland for which he was known. His professional card for the time read: "Specialty—genito-urinary surgery and venereal diseases."

Among his other distinctions Dr. Link is the only living graduate of an Indiana proprietary medical school and the only living member of the original faculty of I. U. School of Medicine.

To Dr. Goethe Link: On your 100th birthday your 5,000 ISMA colleagues and friends throughout the state wish you many happy returns of the day. May you have many more.

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Vol. 72, No. 6
JUNE 1979

USPS 284-440
ISSN 0019-6770

Editorial & Advertising Office:
3935 N. Meridian St.,
Indianapolis, Ind. 46208

EDITOR
Frank B. Ramsey, M.D.
MANAGING EDITOR
Martin T. Badger
BUSINESS MANAGER
Donald F. Foy

CONSULTING EDITORS
Charles A. Bonsett, M.D.
A. W. Cavins, M.D.
Samuel R. Mercer, M.D.
Lall G. Montgomery, M.D.
W. D. Snively, M.D.
I. W. Wilkens, M.D.

EDITORIAL BOARD
Elton Heaton, M.D.
Rodney A. Mannion, M.D.
(Terms expire Dec. 31, 1979)
Alvin J. Haley, M.D.
Wei-Ping Loh, M.D.
(Terms expire Dec. 31, 1980)
Steven C. Beering, M.D.
Paul S. Rhoads, M.D.
(Terms expire Dec. 31, 1981)

THE JOURNAL of the Indiana State Medical Association is published monthly in the interests of the medical profession of Indiana. No copyright claimed. Copyright rests solely with authors, who are responsible for statements made in their articles. Views expressed do not necessarily reflect the opinions of the editors. Scientific and editorial contributions are accepted for exclusive publication, subject to editorial requirements.

All issues since 1967 available on microfilm from University Microfilms, Inc., 300 N. Zeeb Rd., Ann Arbor, Mich. 48106. Indexed in Index Medicus and Hospital Literature Index.

Advertising rates and data available on request. Representative for national advertising: State Medical Journal Advertising Bureau, Inc., 711 South Blvd., Oak Park, Ill. 60302.

Publication deadline: 1st day of month preceding month of issue.

Subscriptions: $14 per year, USA; $16, Canada; $17, foreign; $12, libraries; $10, senior ISMA members; $8, members; except for special issues, single copies not available. Subscriptions renewable only in January and July.

Second-class postage paid at Indianapolis Ind. and additional mailing office.

SCIENTIFIC ARTICLES

409 **Neonatal Seizures—**
Christopher L. Meyer, M.D.
(18th Continuing Medical Education article)

414 **The Five Fingers of Cardiology—**
R. Joe Noble, M.D.

416 **Two Applications of the Law of LaPlace to Obstetrics—**
Richard J. Noveroske, M.D.

418 **Risk of Cytomegalovirus Exposure to Staff in a Preschool for the Retarded—**
Kay S. Browne, M.D.

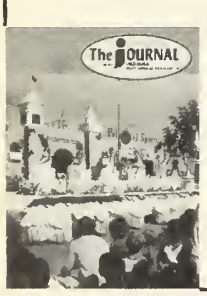
403, 408 **Clinical Notes: Dermatology—**
Jere D. Guin, M.D.

SPECIAL FEATURES

380 **Editorials**
388 **Guest Editorial: 'Dispense as Written'**
390 **Commentary: Too Many Doctors?**
390 **ISMA's New Public Relations Director**
397 **Rural Hospitals: Changing Role**
399 **Court Action**
423 **1979 Yearbook Section**

DEPARTMENTS, MISCELLANEOUS

375 **Medical Museum Notes**
378 **What's New?**
385 **There's a Word for It**
392 **Auxiliary Report**
402 **Future File**
402 **Calendar of Events**
404 **Cancer Corner**
479 **News Notes**
484 **CME Quiz**
486 **Obituaries**



ABOUT THE COVER

A parade traditionally marks the end of the annual Mermaid Festival in North Webster, located in the center of Indiana's lake region, Kosciusko County. This year's festival, June 23-30, will feature motocross races, a garden tractor pull, waterball contests, a greased pole contest and more. The event is sponsored by the International Palace of Sport youth foundation.



A simple solution for beating the high cost of feeding babies.

Powdered Soyalac mixed with water (according to ections on the label) is an inexpensive, soy-based nt formula your patients can buy.

Up to 50% less expensive than ready-to-serve mulas.

Up to 25% less expensive than liquid concentrates. luding our own!

Soyalac is the only leading milk-free infant for- la available as an inexpensive powder. It provides ctly the same nutritional balance as Soyalac's con- centrated and ready-to-serve infant soy formulas – a fraction of the cost.

Your patients who use formula will appreci knowing about it.

For detailed information and samples, please c or write the Soyalac sales representative in your ar

Loma Linda Foods 11503 Pierce Street
Riverside, CA 92515 (714) 785-2475
Loma Linda Foods 13246 Wooster Road
Mount Vernon, OH 43050 (614) 397-7077

Loma Linda

WHAT'S NEW?

Acme United Corporation is the sole distributor in the U.S. of new surgical products made in England by Smith and Newphew, Ltd. Op-Site® is a wound dressing that is a thin waterproof membrane which acts like a second skin. Airstrip is a waterproof microporous plastic wound dressing with Melolin pad.

* * *

Ventures Division of the Will Ross Company has a new odor control device for medical use. The "Plastocon Odor Neutralizer" may be used in reception areas, in offices, or in surgical or laboratory rooms. Useful life is three to six months.

* * *

The Anatole J. Sipin Company of New York City has a new Mercury Dosimeter Badge to be worn by personnel in industrial areas with significant levels of mercury vapor. The badge is to be worn on a collar or lapel for eight hours. It is then processed in a laboratory. The results are read as the number of milligrams of vapor per cubic meter.

* * *

Park Surgical Company has an amplifier, the MK II Amplifier, designed to aid sufferers of Parkinson's Disease and vocal cord palsy, laryngectomees and other people with speech inadequacy requiring reinforcement of volume. It is lightweight and uses a standard 9 volt battery.

* * *

Training aids for critical care nursing personnel are available from Hewlett Packard. A four-part slide and sound program details techniques for monitoring ECG, pressure, respiration and temperature. The program consists of 350 35mm slides, four audio tape cassettes and a 52-page booklet.

* * *

Oxygen therapy for newborns and monitoring of vital signs in adults will be the subject of a new quarterly "Monitor" to be published by Litton Medical Electronics. Copies are free on request to physicians, neonatologists, respiratory therapists and other hospital personnel.

* * *

Muirhead, Inc. has a new Zero Gradient Aural Thermometer. The sensor is introduced into the external auditory canal and is connected to digital display. A servo controlled heating pad, on a headband, is placed over the ear to prevent external cooling. The readings are close to esophageal.

* * *

IN BOOKS . . .

The Center for Study of Multiple Gestation has published "The Care of Twin Children: A Common-Sense Guide for Parents." The authors, Rosemary Theroux and Josephine Tingley, are each mothers of twins. They are registered nurses and interviewed hundreds of mothers of twins and triplets over a period of four years. Comments by those who have read the book are complimentary and many readers have recommended the book for mothers of single children. 128 pages—$12.95 for hardcover, $6.75 for softcover.

* * *

A new book, "Professional Incorporation and the Employee Stock Ownership Plan" by John L. Henss, C.P.A. is available for $4.98. The address is E.S.O.P., P.O. Box 1322, Des Moines, Iowa, 50305. In order to allow various members of a professional corporation to establish retirement plans with varying percentages of contribution, Mr. Henss advises (in states in which the law permits) the formation of a group of solo-doctor corporations which are held together by forming a partnership of the several single-doctor corporations. Besides state laws, other considerations also are discussed in the book.

* * *

Limited, hardcover copies of "Diabetes and Exercise" are available for $19.50 by addressing the Association at 600 Fifth Ave., New York City 10020. The book contains the proceedings of the Conference on Diabetes and Exercise held in Santa Yuez, California, March 13-17, 1978.

* * *

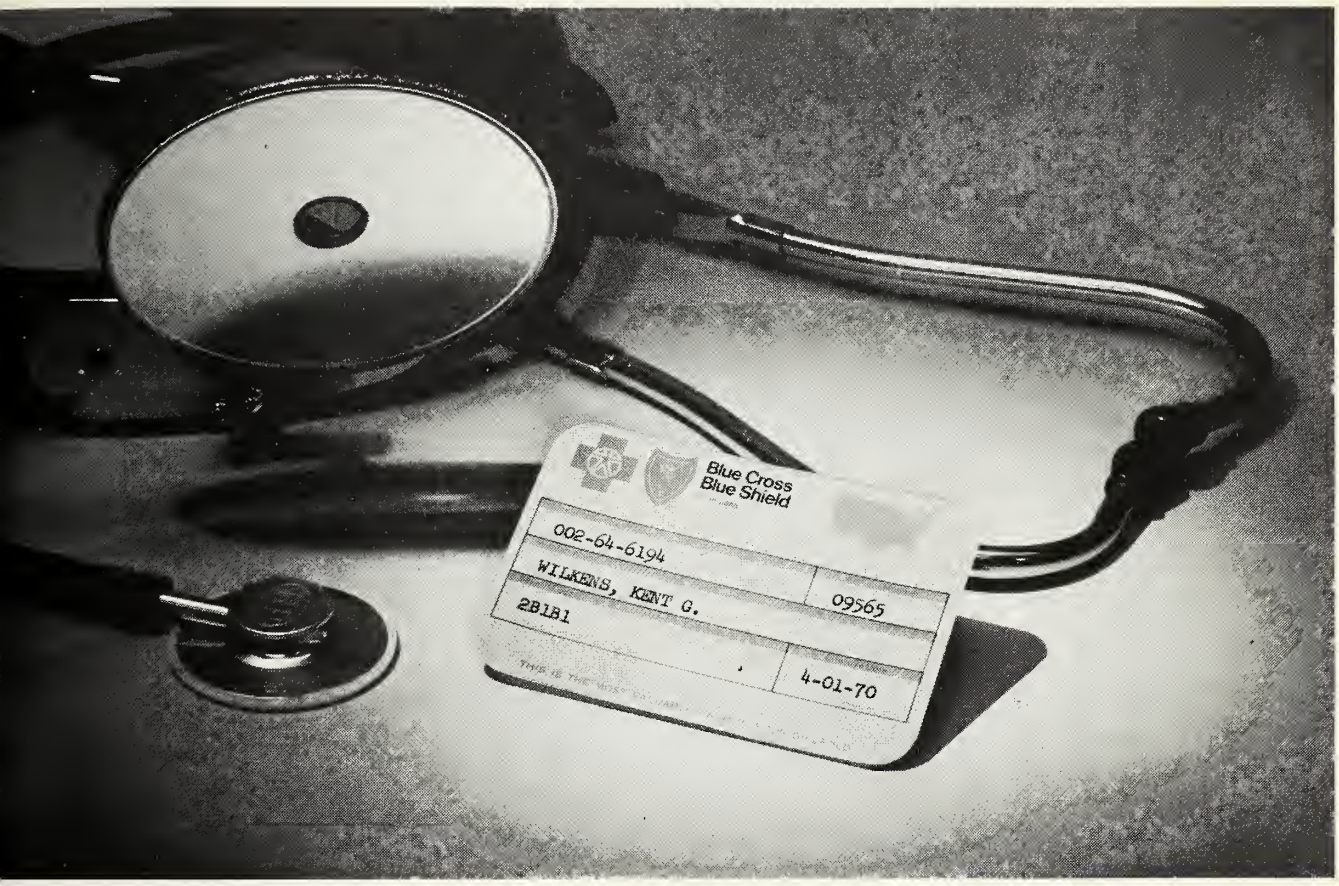
Jimson "loco" weed is the latest form of drug abuse. Reports in PEDIATRICS tell of 29 teenagers admitted to hospital because of toxic symptoms. The active constituents are atropine and scopolamine. Symptoms are visual and auditory hallucinations, disorientation with respect to time, place or person, combative behavior, accelerated heart rate, elevated blood pressure, above normal temperature and urinary retention.

* * *

Ballantine Books offers "The Seasons of a Man's Life," the first full report by the researchers who discovered the pattern of the adult life cycle. It is described as being as basically important as the works of Kinsey and Erikson. $5.95.

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- **One full year in-hospital care**
- **100% semi-private room and hospital extras**
- **Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy**
- **$250,000 Major Medical Benefits**

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Paul Biltimier, Senior Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4241.

We believe in being better

Blue Cross Blue Shield
of Indiana

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark. Nat'l Assn. of Blue Shield Plans

EDITORIALS

Editorial Notes . . .

Upjohn chemists report the first laboratory synthesis of the antibiotic spectinomycin. The synthetic route has also yielded a new class of antibiotic compounds related to spectinomycin but unavailable from natural sources. Modification of the natural spectinomycin has yielded antibiotic substances less active in inhibiting bacteria. It is hoped that the synthetic forms now under study will possess powers and capabilities in excess of the natural forms.

Secretary of HEW Califano has ruled that propoxyphene (Darvon, Lilly) will not be removed from the market. However, due to deaths and severe reactions from the drug's use with alcohol and other central nervous system drugs, the Secretary called for a public hearing and will cause additional warnings to physicians. Package literature will be revised and FDA will consider changing the drug's prescription category. During the past 21 years, Lilly has not received any report of death or serious injury associated with use of propoxyphene in accordance with labeling.

People who weigh 10% less than the average usually live longer than the average. The life insurance industry reports that a recent study shows that only one-third of all adults know the healthiest weight based on height and build. Almost no one underestimated what they should weigh. Overweight people usually either overestimate the healthiest weight or don't know what they should weigh.

PEDIATRICS reports that cribs and playpens lined with nylon mesh are dangerous. Infants' buttoned clothing tends to catch in the mesh. One child almost strangled to death. Cribs with slats are recommended.

Medical Advice Often Ignored

"If we Americans lived healthier lives, ate more nutritious food, smoked less, maintained our proper weight, and exercised regularly, it would do more to improve our health than anything doctors and medicine could do for us."

This statement, appearing in a recent national health survey, was declared true by 95% of the respondents.

So, what is the problem? The problem is that the same survey indicated that while most of the people know what to do a great majority of them do not do it.

Seventy per cent of smokers know it increases chances of cancer but continue to smoke. Most overweight folks feel overweight but do not lose. Two of five believe they should exercise more.

Sixty seven per cent of Americans recognize that they would be healthier if they ate more of some foods and less of others. More than three of five adults are overweight.

One of five people say they do not get enough sleep. Less than one of five of those who have drinking problems have sought help for it.

All of these facts were obtained by Harris and Associates for the Pacific Mutual Life Insurance Com-

CONTINUED ON PAGE 385

THE INDIANA STATE MEDICAL ASSOCIATION

3935 N. Meridian, Indianapolis 46208—Telephone 925-7545

1979 Annual Meeting—Oct. 13-17—Indianapolis

OFFICERS FOR 1978-79

President—Arvine G. Popplewell, 3530 S. Keystone, Indianapolis 46227

Treasurer—Joseph F. Ferrara, 111 S. Water St., Franklin 46131

Assistant Treasurer—Douglas H. White, 3524 N. Meridian, Indianapolis 46208

Executive Committee—Paul W. Holtzman, Chairman; Arvine G. Popplewell, Joseph F. Ferrara, Douglas H. White, John W. Beeler, Eli Goodmon, Alvin J. Haley, Martin J. O'Neill, Members

Speaker of the House—Lloyd L. Hill, 302 N. Duke St., Peru

Vice Speaker—Lawrence E. Allen, 2009 Brown St., Anderson

Executive Director—Mr. Donald F. Foy

TRUSTEES

District	Term Expires
1—John A. Bizol, Evansville	Oct. 1980
2—Harold M. Manifold, Bloomington	Oct. 1981
3—Thomas A. Neathamer, Jeffersonville	Oct. 1979
4—Howard C. Jackson, Madison	Oct. 1980
5—Paul Siebenmorgen, Terre Haute	Oct. 1981
6—Davis W. Ellis, Rushville	Oct. 1979
7—Donald C. McCollum, Indianapolis	Oct. 1980
7—John G. Pantzer, Indianapolis	Oct. 1981
8—Jack M. Walker, Muncie	Oct. 1981
9—John A. Knote, Lafayette	Oct. 1979
10—Martin J. O'Neill, Valparaiso	Oct. 1980
11—Herbert C. Khalouf, Marion	Oct. 1981
12—Alvin J. Haley, Fort Wayne (Chairman)	Oct. 1979
13—Donald S. Chamberlain, South Bend	Oct. 1980

ALTERNATES

District	Term Expires
1—E. DeVerre Gourieux, Evansville	Oct. 1979
2—Edgar R. Cantwell, Vincennes	Oct. 1980
3—Richard G. Huber, Bedford	Oct. 1980
4—Mark M. Bevers, Seymour	Oct. 1979
5—William G. Bannon, Terre Haute	Oct. 1979
6—Don W. Hibner, Richmond	Oct. 1981
7—I. E. Michael, Indianapolis	Oct. 1979
7—Gerald J. Kurlander, Indianapolis	Oct. 1979
8—Ted S. Doles, Middletown	Oct. 1979
9—Max N. Hoffman, Covington	Oct. 1980
10—Leonard W. Neal, Munster	Oct. 1981
11—Fred C. Poehler, La Fontaine	Oct. 1980
12—Franklin A. Bryan, Fort Wayne	Oct. 1980
13—John W. Luce, Michigan City	Oct. 1979

2 NEW ISMA sponsored insurance plans available to you

Two new essential insurance plans have been added to broaden the range of ISMA sponsored plans. An In-Hospital Protection Plan and a Medicare Supplement Plan brings the total number of supplemental insurance plans to six that are available to eligible member physicians and professional corporations.

NEW PLANS:

IN-HOSPITAL PROTECTION PLAN provides cash benefits of $20 thru $100 per day (when accidental injury or sickness causes hospital confinement). Benefits are payable directly to you, the insured member, and commence the very first day of covered hospitalization. Intensive care and convalescent home benefits included. Spouses and eligible dependent children may be included. Benefits reduce at age 65.

MEDICARE SUPPLEMENT PLAN provides "gap filler" benefits so essential today. Medicare revised their benefits effective January 1, 1979 and these ISMA sponsored plans have been revised to update these changes, supplementing both Medicare Part A and Part B.

OTHER INSURANCE PLANS AVAILABLE:

- **INCOME PROTECTION PLAN** provides an income of up to $2,000 monthly if you are disabled and unable to work due to a covered accident or illness.
- **EXCESS MAJOR MEDICAL PLAN** provides coverage after your present plan is exhausted. Up to $500,000 coverage with a $20,000 deductible. Unlimited surgical schedule and includes extended care and nursing home benefit.
- **OVERHEAD EXPENSE PLAN** provides needed dollars to help you pay off overhead expenses (employees' salaries, rent, utilities, property taxes, etc.) in the event of your covered disability. When disability strikes—your business overhead expenses keep right on going—even when you can't.
- **FAMILY INSURANCE PLAN** provides benefits up to $100,000 in the event of your death.

Underwritten by Continental Casualty Co. and Valley Forge Life Insurance Co., Chicago, Illinois

COUPON

For information on the ISMA sponsored plans including costs, terminations, exclusions, etc.

☐ In-Hospital Protection Plan
☐ Medicare Supplement Plans
☐ Income Protection Plan
☐ Excess Major Medical Plan
☐ Overhead Expense Plan
☐ Family Insurance Plan
☐ Professional Corporation

Dr._____

Street_____

City_____ Zip_____

Administered by



j. russell townsend and associates

Mail to:
Indiana State Medical Association
3935 North Meridian Street
Indianapolis, Indiana 46208

NOW IN OUR 118th YEAR OF RESTORING CONFIDENCE TO THE DISABLED

The year 1979 marks one hundred and eighteen years of service in the field of prosthetics for the Hanger Organization. Over the years the name Hanger has become synonymous with fine prosthetic appliances.

Today, there are over 50,000 persons who rely on Hanger Prostheses—more than any other make.

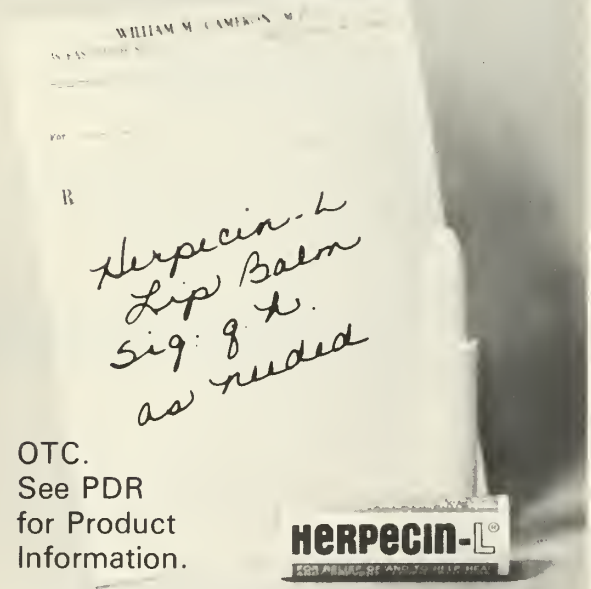
Hanger's complete line of arm and leg prostheses for all types of amputations are constantly being improved through research. Along with the most modern in Prosthetic equipment, Hanger offers the services of our highly qualified staff of Certified Prosthetists. Each Hanger Prosthetist is well versed in the latest developments through regular attendance of College Prosthetic Seminars.

There are over 40 Hanger Offices in principal cities throughout the United States and Canada.

Hanger PROSTHESIS

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807

Dx: recurrent herpes labialis



OTC.
See PDR
for Product
Information.

For samples, write Dept. F at:

CAMPBELL LABORATORIES, INC.
P.O. Box 812, FDR, N.Y., N.Y. 10022

"Herpecin-L" Lip Balm is available at all Haag Drug Stores and other select pharmacies.

Tenuate® ℞
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression, changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.
PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
ADVERSE REACTIONS: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

B-3921 (Y587A)

Whether overweight is a complicating factor... or just uncomplicated overweight.

Tenuate® Dospan® (IV)

(diethylpropion hydrochloride NF)

75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

In uncomplicated obesity.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

Merrell

For prescribing information see opposite page.

new 600 mg tablets

Motrin®

ibuprofen, Upjohn



More convenient for some of your patients.

Now there are three Motrin tablet strengths to choose from–
600 mg, 400 mg, and 300 mg

Upjohn The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A.

© 1979 The Upjohn Company

EDITORIALS

Medical Advice Often Ignored

CONTINUED FROM PAGE 380

pany in a meticulously conducted survey of 1,517 adults chosen to represent a cross section of America. In addition, 175 corporations chosen from the 1,250 largest firms and 35 labor unions were included by interviewing a representative from each who was best prepared to discuss the company's or union's view on health.

The pollsters were impressed by the widespread recognition of a shift to health maintenance and preventive medicine. They thought that even more important than savings in cost is the belief that a changed life style would do more for good health than medical care ever will.

All this knowledge, while never having been quantified by a top-notch survey, is and long has been common knowledge among medical practitioners. While the survey comments tend to infer that physicians could and should influence public behavior, most doctors realize that most good advice on the subject is ignored unless there is an acute complication—and such advice is not very well comprehended even with acute illness.

It is a sticky problem. It is not one that can be affected by legislation. Public education is not the answer —most people know what to do but don't do it. Those who demand more preventive medicine don't know what preventive medicine is. Except for public sanitary works and universal immunizations, most preventive medicine is the private responsibility of each individual.

More and better teaching of hygiene in common school may be required. Perhaps early acquisition of knowledge of good health habits will make citizens better practitioners of their own health rules.

Heart and Lungs

There's a Word for It

RICHARD J. NOVEROSKE, M.D.
Evansville

The words "heart" and "lungs" are useful, one-syllabled, Anglo-Saxon words that carry much feeling. Almost everyone, inside or outside of medicine, has some idea of what the heart and the lungs are.

And I think we should use these simple words more often. But we don't in our ordinary medical practice. Look about you. You hear of "open heart surgery," but you see signs directing you to the "cardiaccatheterization laboratory." And you find "cardiac silhouette" in x-ray reports, when the writer is talking about the heart image on an x-ray film. Why can't he just call it "the heart"? When one looks at a heart as shown on an x-ray film, a heart at open-heart surgery, an autopsy table, or a beef heart in a butcher shop, they are all impressions on the human mind.

And what's the matter with "heart infarct"? Instead we say "myocardial infarction" and stick in some extra syllables. Is "myocardial infarction" any more accurate with the extra trimmings? I don't think so. The endocardium is also affected during a heart infarct—not just the myocardium alone. Most people think of the heart as a muscular pump; saying "heart infarct" makes the message more clear—that the heart is affected—to people who haven't had a medical school education. It helps us to communicate, and that's what we should be trying to do most of the time.

Similarly, "lung infarct" seems more clear than the "pulmonary embolus" that one frequently sees in reports. Most everybody knows what a lung is, but many non-medical people don't know what "pulmonary" means. Are we trying to confuse people?

And "pulmonary" is longer—four syllables long, and Latin in origin, in comparison with "lung." It helps to write and speak with Anglo-Saxon words, rather than the long, tortuous Latin words; Anglo-Saxon words carry "more punch" and are clear to the reader or listener.

Then too, the "embolus" is not always accurate. The lung infarct process is also one of local stagnation rather than just a clot moving in from some place "upstream." Why not just define the end process, an infarct, when we're not sure of the origin of the process?

English is based on our freedom and is such a forceful and flexible language that it's more clear and carries more punch than Latinized forms. It's more readily understood by most people. I think we should write in plain English. But what do you think?

When the indications surface...



NEOSPORIN® Ointment

(Polymyxin B-Bacitracin-Neomycin)

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically,* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically,* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chroni dermatoses, it should be borne mind that the skin is more liable to becor sensitized to many substances, including neomycir The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as fai to heal. During long-term use of neomycin-contain products, periodic examination for such signs is advisable and the patient should be told to disconti the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoic for that patient thereafter.

PRECAUTIONS: As with other antibacterial prep tions, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occu

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reporte (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



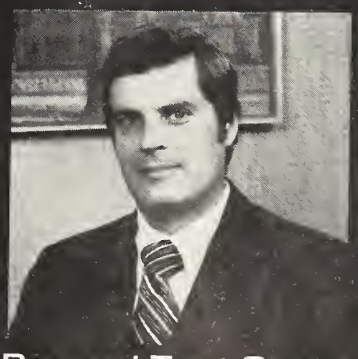
Isn't it about time to return stability and profitability to your investments?

You can have both, you know. If you put the people in our Personal Trust Group to work for you. Professionals like Gary Brown. Gary believes in a partnership approach to money management. First, he works with you to determine your needs and goals. Then, he presents an individualized program designed to increase the return on your investments and to minimize market volatility. And he maintains a follow-up dialogue with you to keep your program consistent with your needs and goals and with changing market conditions.

Gary backs up his recommendations with the same expertise that has won our Asset Management Group nationwide recognition for consistent asset management performance.

All your life you've worked to build your net worth. Let a professional help make the most of it. Put Gary Brown to work for you. Give him a call at 639-8192.

Personal asset management. It's another way we're proving we want to be your bank.



Personal Trust Group

AMERICAN FLETCHER NATIONAL BANK AFNB

Guest Editorial

The Case for 'Dispense as Written'

J. K. WESTON, M.D.
Purcellville, Virginia

IN an editorial in the January issue of VIRGINIA MEDICAL,[1] the medical profession in Virginia is offered what seems to me an overly rosy and somewhat biased commentary on the recently introduced Virginia Voluntary Formulary. This includes an exhortation to fellow physicians to, in effect, give it a try and thereby break old habit patterns, as though their therapeutic activities were but pro-forma, conditioned reflexes of a "knee-jerk" type as alleged by some.

I would not in any way minimize the sincerity or competence of the members of the Advisory Board, individually or collectively—or the fact that they worked most diligently at their task. Neither would I deny that the studies they have made or the criteria they have adopted for a drug product's inclusion into that Formulary are some of the best I have seen in existence. Nevertheless, I remain disquieted and would not, as a physician responsible for *my* patient's therapy, delegate to another the authority, let alone the responsibility, to discharge *my* obligation until and unless a high order of clinical therapeutic interchangeability data in which I could have confidence were available to me in the published literature or in the experience of myself or of respected colleagues. The more critical the therapeutic need, the more certain I would be to sign the place on the prescription marked "Dispense as written" or—if I felt my therapeutic ability wasn't up to the mark—refer the patient to another physician whom I deemed more therapeutically competent than I.

When I noted that the critical requirement of the law was that *any* product listed in the Formulary must be determined to be "either therapeutically *or chemically* (emphasis mine) interchangeable with . . . other products of the same established name" (established means generic), that non-critical requirement reduces the Virginia law to just another generic law. That members of the Advisory Board would believe that any useful formulary could be mounted and endure on such a flawed base surprises me, since I know some of the members of the Board are fully aware of a substantial mass of published literature showing unequivocally that drug product clinical performance is related directly to the formulation and quality control exercised by the producer.

The Board's reliance on asking the proper questions to provide a gateway to formulary listing is quite proper and their conclusion that, if this barrier of theirs were passed, the products involved *"are very probably therapeutically equivalent"* (emphasis mine) *may* be true in *some* instances. But how true in how many—and which ones—and how can they be sure? And how interchangeable are they *clinically?* I fail to find questions in the Board's gateway to the Formulary asking for published clinical data demonstrating unequivocal clinical interchangeability. In fact, both they and I know there is a paucity of such data in the literature, unfortunately. Neither do I find a requirement for quality control equivalen-

This article orginally appeared in the March 1979 issue of VIRGINIA MEDICAL, the publication of The Medical Society of Virginia, and is reproduced here by permission of that journal.

The author has been director of the AMA's Department of Drugs and secretary of its Council on Drugs. Until 1974 he was vice-president of the National Pharmaceutical Council. He is now president of Weston Consultants, Inc., Purcellville, Va., and adjunct professor of clinical engineering, George Washington University School of Medicine, Washington, D.C.

cy to that exercised by the innovator being demonstrated by those producers which the board lists as producing satisfactory generic equivalents, presumably clinically interchangeable.

In short, I know, and I'm sure members of the board know, that generic *naming* of pure chemical agents shows but a chemical (not even a physical) identity among them. (A diamond and a piece of coal are generically carbon and therefore chemically—but obviously not physically—equivalent. In the drug field, identical chemical stereoisomers are chemically equivalent but physically different —and that difference alone can make one isomer highly potent therapeutically and the other without activity). The physical characteristics of the active chemical agents found in marketed drug products have been shown to influence the therapeutic performance of such marketed drug products. This is not surprising. Furthermore, marketed drug products produced by *different* manufacturers contain different excipients in many instances, despite the presence of the same chemical agent in the same amount. These excipients may and do exert an additional influence on how such drug products perform in their final and most important repository—the patient.

Once aware of the foregoing facts, the members of the medical profession would do well, in my considered opinion and judgment, to use those drug products, however named and wherever produced, which both their experience and their evaluation of the available published literature convinces them of the safety, efficacy, and reproducibility of the therapeutic results in their patients. Whoever claims to have a therapeutically interchangeable product in man should be prepared not only to have answers to all the Formulary Board's gateway questions governing entrance to that Formulary, excellently as they have structured that gate, but also have available clinical interchangeability data (preferably published) and quality control data as well. All this should be adequate to convince the individual physician that he still fully meets his responsibility for the best therapeutic interests of his patients if and when he permits another to make such a substitution within the Formulary (or any other) parameters.

Regardless, the physician should not be led to believe that, by signing his name on a prescription blank that permits a different drug product from the one they have seen perform for long periods before their very eyes, so to speak, they are somehow permitting something that has been *proven* to be equally safe and beneficial to their patients and which may save those patients a few cents. Cheapness and quality are not likely to be wrapped in the same package. (Incidentally, where is the evidence of great savings to patients with equivalent therapeutic performance from areas where generic formularies have been in existence for some time? I know of no substantial body of data available proving substantial savings resulted.)

In short, I yet fail to find compelling published data demonstrating continuing and reliable clinical interchangeability of different lots of chemically similar drug products of different manufacture.

I do not doubt that some physician's experience does support such interchangeability for certain drug products of different manufacture (perhaps at times by merely adjusting the dose), nor, when it does, that such physicians usually prescribe the less expensive product for their patients.

So, instead of starting the New Year resolved to subscribe to the old generic equivalency myth inherent in the Virginia Formulary Law, the Virginia physician might well better adopt a "wait and see" posture and maintain those prescribing practices which *he* has found work best in *his* patients for the diagnosis *he* has made and modify these only when in *his* judgment it will be best for *his* patients to so do.

So far, the Formulary is voluntary, which Doctor Owen emphasizes, and that is all to the good. But a look at the total picture shows that proponents of generic drug use often move from supporting voluntary physician participation to a call for legally mandatory physician participation, to any possible degree of attainment, and this should make physicians doubly wary.

It would seem to me that if a generic formulary really had much in its favor, either therapeutically or economically, it would long since have been voluntarily embraced by the majority of the medical profession. The fact that this is not the case should be a significant caution signal to the practicing physician in Virginia and all other states.

1. Owen JAjr: Introducing: the Virginia Voluntary Formulary *Va Med*, 106:83-84, 1979.

Commentary

Too Many Doctors?

There is nobody in the federal government quite like Joseph Califano for placing a monetary value on health care.

The Secretary of Health, Education and Welfare's preoccupation with costs has helped him compile some headline-grabbing figures, some of which he used recently in a speech before the American Association of Medical Colleges.

We face an oversupply of doctors, Califano said. The number of U.S. medical school graduates has nearly doubled from 8,000 in 1963 to 15,000 this year. By 1990, he predicted, there will be 242 physicians for each 100,000 people in the nation.

The chief effect of this oversupply, Califano said, is "drastically rising costs." Every physician adds $12 million in health care costs to the economy. And, he added accusatorially, as the number of surgeons in an area rises, so does the number of operations and surgeons' fees.

After dropping these bombshells, Califano continued by pointing out that the doctors we do have are geographically maldistributed and overly specialized.

Reprinted with permission of the VINCENNES SUN-COMMERCIAL.

While the dearth of primary care physicians and geographic maldistribution are familiar problems, the notion of too many doctors was something new. We took our queries to Dr. Steven C. Beering, dean of the Indiana University School of Medicine.

Is there an oversupply of doctors?

Nationally, explained Dr. Beering, there is a sufficient—but unevenly distributed—supply of doctors. In the future there could be too many.

Indiana has about 130 doctors per 100,000 persons, compared to 177 per 100,000 nationally. About half of the state's doctors are in primary care and, blessed with conducive geography and a statewide medical education system, Indiana has fairly good distribution.

"The problem is the influx of foreign doctors," says Dr. Beering. About 22% of practicing doctors now are foreign although a new law should reduce that in the future. He was pleased to hear Califano stress the government's opposition to the admission of foreign medical graduates.

Dr. Beering has no plans to reduce the size of I.U.'s medical classes, as Califano suggests. Roughly 2% of the nation's population is in Indiana and the state has about 2% of the medical school places.

New Public Relations Director



Barbara Lauter, a graduate of the William Allen White School of Journalism at the University of Kansas, assumed her new position last month as Director of Public Relations for ISMA.

Lauter was formerly employed as Publicity Director for the Indiana University School of Music at Bloomington.

While living in Kansas, she was employed as Media Manager with an advertising/PR firm in Wichita, and later as PR Director of the Wichita Symphony Society.

Lauter won first place in the magazine publicity category of the 1977 communications contest sponsored by the National Federation of Press Women. Previously, she had won several communications awards sponsored by the Kansas Press Women and by the Ad Club of Wichita.

A sports buff and avid I.U. basketball fan, Lauter also enjoys photography, music, theater and traveling. She has visited every state on the continent, as well as Canada, Mexico and 11 European countries.

She replaced Bob Sullivan, who is now ISMA's Director of Medical Services and Insurance.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android® 5 mg. Buccal / 10 mg. Oral / 25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR



AUXILIARY REPORT

This month's Auxiliary Report was prepared by Mary Lois (Mrs. Donald G.) Miller of Elkhart, convention chairman.

Charlotte (Mrs. Abner P.) Bennett
President, ISMA Auxiliary

Looking over our shoulders at the recent 35th House of Delegates meeting at Goshen, Ind., we are pleased to report the Auxiliary is alive and well and thriving in Indiana. With memberships increasing and counties of all sizes actively participating in the health of their communities, the recent convention was a reassuring barometer.

At the Tuesday evening dinner honoring our presidents, it was symbolic that 12 of these ladies who have been the dynamic force in the ongoing programs of the Auxiliary were seated in the center of a membership represented by women who were attending their first convention and those who have attended faithfully for many years. The thread of interest and concern expressed by the county presidents during the business sessions was graphically highlighted by the involvement of counties in diverse community needs. These range from the immunization audit currently being carried out throughout the state to educational programs in the schools and assisting in volunteer agencies providing better health care to children, pregnant women, older citizens and other people needs.

A highlight to this convention was "The Country Store," opened only for this occasion with a total sales of $2,180 for two days. Items donated by the county auxiliaries resulted in a flurry of sales, profits from which were donated to our State AMA-ERF Fund. This total, added to the already increased AMA-ERF yearly donations, gives us an impressive increase of $8,000+ over last year's contributions.

It was our good fortune to have Mrs. Quentin Quickstad, national AMA-ERF chairman, address the importance of communication. For most effective results, our auxiliaries must maintain a two-way flow of information to and from the county, state and national offices. The execution of ideas is carried out ultimately at the county level, with suggestions and ideas flowing back through our state to national officers. The business sessions offered new ideas and suggestions with refreshment breaks providing time for additional sharing. We are grateful to Dr. Popplewell for the amount of time he spent with us, not only for dinner but attending many sessions. His attention assured us of the ISMA's continuing interest in the Auxiliary. Dr. Robert Johnston spoke about the help now offered to the impaired physician, and Betty Rendel told of the growing participation of women in politics; both of these talks provided new dimensions to the scope of concern within the Auxiliary. After discussing the proposed title change for the HOOSIER DOCTOR'S WIFE, a decision was reached to postpone the final vote for a new name until the next House of Delegates in the spring.

Continuing in the fine tradition of strong leadership, the convention ended with the inauguration of Charlotte Bennett of Evansville. This House of Delegates provided fellowship, information and relaxation for the 170 members and guests who attended.



McClain Car Leasing, Inc.

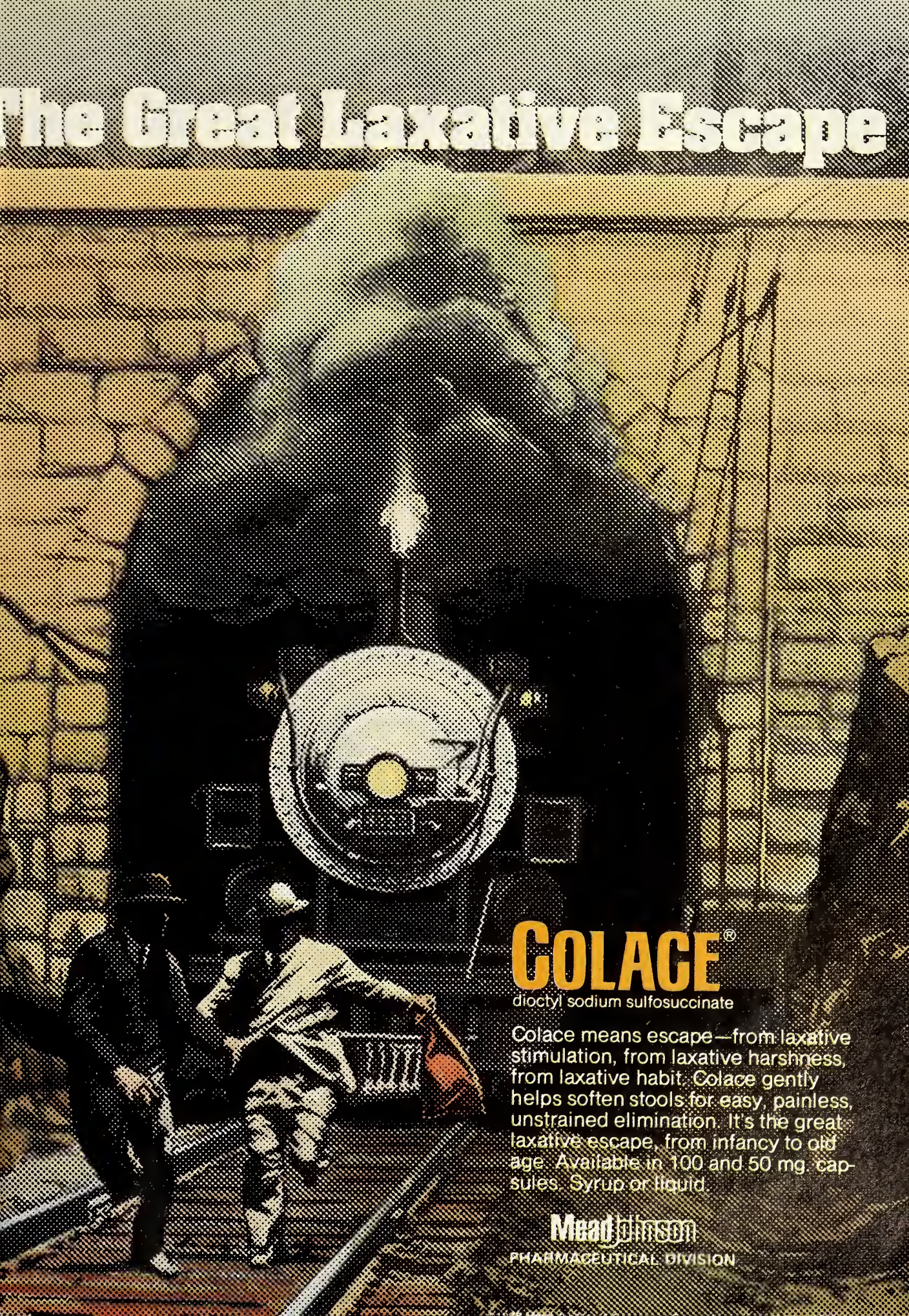
1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA


The Great Laxative Escape
COLACE®
dioctyl sodium sulfosuccinate
Colace means escape—from laxative stimulation, from laxative harshness, from laxative habit. Colace gently helps soften stools for easy, painless, unstrained elimination. It's the great laxative escape, from infancy to old age. Available in 100 and 50 mg. capsules. Syrup or liquid.
Mead Johnson
PHARMACEUTICAL DIVISION

COMPATIBILITY



Eastern Tiger Swallowtail Butterfly
(Papilio glaucus)

Does it influence your choice of a peripheral/cerebral vasodilator*?

Vasodilan–compatible with coexisting diseases (e.g., glaucoma, diabetes)

Vasodilan has not been reported to affect the course of coexisting disease; it has not been reported to affect blood sugar levels or to raise intraocular pressure.

Vasodilan–compatible with concomitant therapy

Vasodilan has not been reported to affect the treatment of coexisting disease; it is compatible with such drugs as hypoglycemics and miotics.

Vasodilan–compatible with your total regimen for vascular insufficiency

Vasodilan can be a valuable adjunct in planning a total therapeutic program for vascular insufficiency.

***Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg. Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily. Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

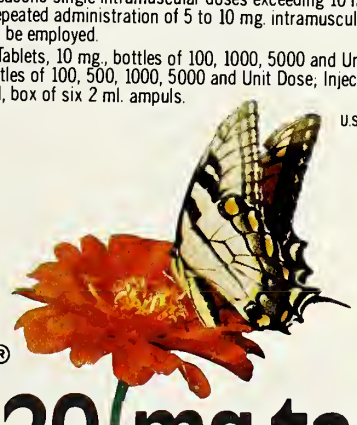
Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

U.S. Pat. No. 3,056,836



VASODILAN® 20-mg tablets

(ISOXSUPRINE HCl)

20 mg q.i.d. recommended dosage

Mead Johnson

PHARMACEUTICAL DIVISION

© 1978 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. MJL 7-4237R

This asthmatic isn't worried about his next breath...



he's active
he's effectively maintained on

QUIBRON®

Each capsule or tablespoonful (15 ml) liquid contains theophylline (anhydrous) 150 mg and glyceryl guaiacolate (guaifenesin) 90 mg

- theophylline for effective around-the-clock bronchodilator therapy
- 100% free theophylline

Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema.

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100; Liquid in bottles of 1 pint and 1 gallon.

See package insert for complete prescribing information.

Mead Johnson

PHARMACEUTICAL DIVISION

© 1979 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. MJL 6-4220R4

Changing Role

Rural Hospitals



Otis R. Bowen, M.D.
Governor
State of Indiana

(Following is the text of a talk delivered by Governor Otis R. Bowen, M.D., during the Fourth Annual Indiana Hospital Association Rural Hospital Seminar. The seminar was conducted April 11-12 in Indianapolis.)

It's always a pleasure for me to be able to talk with fellow health care professionals. However, I particularly enjoy being among a group of people who operate small hospitals, the type of facility in which I practiced for about a quarter century.

Good, basic medicine is being practiced in hospitals like yours, those with less than 150 beds which are located in smaller communities and even in rural settings. Day in and day out, your hospitals and their staffs address genuine human health care needs.

From my perspective, the small hospital deserves a place in our health care delivery system. I wish I could tell you that your place in that system is assured. To do so, however, would be to ignore the stresses within our health care system and the pressures being placed on it from the outside by persons more concerned with costs than with quality of care, or convenience to the patient and concerned families of the patient.

These stresses and pressures suggest that major challenges can determine what your future role will be in an ever-developing, constantly changing health care delivery system.

In an era when health care delivery is becoming increasingly politicized and increasingly removed from direct control by health care professionals, the most basic question affecting your institutions is whether there will be a place for the small hospital in the emerging, changed health care delivery system.

I have already said I think there is, so that question is neither an idle one nor an attempt to startle you into attention. It is a very, very serious question.

Most of your institutions developed because the health care professionals in your community, and your communities themselves, felt there was a need for primary hospital care facilities. The impetus was both professional, since health care could be provided closer to home, and civic, since every community needed a modern hospital if it was to be progressive.

Thus, hospital facilities became as important to a community's vision of its future as were its schools, its highway and rail connections, its recreational facilities, the quality of its government services, the adequacy of its utilities and the vitality of its business and industrial base.

By now, of course, your institutions—once the focus of a community effort—are more or less taken for granted. They have become self-sufficient and the public and civic interest which encouraged that creation has now subsided. That alone poses a threat to your continued ability to operate.

Recently, I heard the statement that hospital development is in somewhat the same stage that grocery stores were not too many years ago. At that time, every neighborhood in every community had a corner grocery. Today, most neighborhood groceries are gone—replaced by more efficient, higher volume, lower margin supermarkets.

Is that to be the future of the small hospital? Are you to be swallowed up by larger institutions, which can offer a greater variety of medical services and achieve economies of scale?

It seems significant to me that the occupancy rates of smaller hospitals are declining. As that happens, and particularly if it continues, the fixed

CONTINUED ON NEXT PAGE

Changing Role

Rural Hospitals

CONTINUED FROM PAGE 397

costs of operating smaller institutions must be spread over a smaller group of patients. The implications are obvious: Room rates and the costs of other services must go up.

Within the larger question of whether there is a place for the small hospital in our health care delivery system are several smaller, equally complex questions. All of them bear on your ability to remain economically viable.

For example, how can small hospitals take advantage of advances in medical technology for the benefit of the people in their community and still maintain a schedule of charges which is affordable and not out of line with those of larger institutions?

And how can small hospitals overcome health manpower problems which obviously affect their ability to function? Doctor shortages are one aspect of the problem, particularly in smaller communities and rural areas, but there also are shortages of nursing personnel, pharmacists, physical therapists, and so on through the catalog of health care professionals. How do small hospitals obtain the personnel they need to operate when professionals tend to go to larger institutions with higher pay and more predictable working conditions?

There also is the question of cost control. I mentioned that occupancy rates are declining, at least nationally, for the smaller hospital and this forces those institutions to spread fixed costs over fewer patients. There are other cost pressures, of course. Suppliers of medical goods are rapidly increasing their prices and the smaller institution cannot achieve the same volume level discounts as the large hospital. Utility costs are skyrocketing. Inflation has created significant demands for salary increases by both non-medical personnel and by salaried health professionals. These pressures clearly affect your ability to control costs, or as clearly dictate that some cost increases are beyond your control.

Based on information I have received, most of your institutions will be exempt from the federal cost containment guidelines. However, most of you have become cost conscious and have done an excellent job of controlling costs. I would urge you to continue to do so, because good management may ultimately determine whether small hospitals can remain a viable part of the total health care delivery system.



Court Action

Hospital Review Committee Records Not Subject to Disclosure in Suit

Records of a hospital review committee were not subject to disclosure in a malpractice suit against a hospital for allegedly negligent supervision and retention of a physician, the Colorado Supreme Court ruled.

A patient filed suit against the hospital and the physician claiming that he negligently performed neurosurgery on him in the summer of 1975. He also named the hospital as a party, contending that it was negligent in appointing, supervising and retaining the physician on its staff.

In August 1975, the hospital suspended the physician's admitting privileges pending an investigation of his treatment of the patient. An ad hoc committee of four staff physicians was created to review the physician's treatment. The committee met twice and then recommended that the physician be summarily suspended pending further investigation. On November 1, 1975, the medical advisory board met and suspended the physician.

The patient sought to take the depositions of members of the ad hoc committee. The hospital filed a motion for a protective order and to quash the subpenas. A trial court quashed the subpenas on the ground that the workings of the review committee were privileged.

On appeal, the Supreme Court affirmed the ruling. The court broadly construed a Colorado statute making the records of a review committee not subject to subpena in a civil suit against a physician to apply in the suit against both the hospital and the physician. The legislature clearly intended that hospital review committees be allowed to act unfettered by fear of subsequent liability, the court said.—*Posey v. District Court In and For the Second Judicial District,* 586 P.2d 36 (Colo.Sup.Ct., Oct. 23, 1978)

Courtesy of THE CITATION, March 15, 1979.

FOX HUNTING SEASON NOW OPEN!

You have to be smart to capture a Fox, the sporty 5-passenger sedan from Audi. With features like front wheel drive, rack-and-pinion steering and 0 to 50 in 8.1 seconds, it also helps to be quick. Giganti only gets a limited number. So buy now, before the Fox hunting season is over.

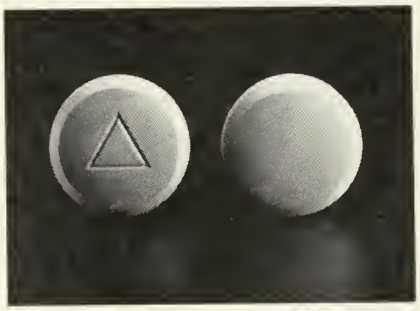


GIGANTI VOLKSWAGEN PORSCHE AUDI
INC.
6901 East 38th Street
Indianapolis, Indiana
545-4211

1978 Service Honor
we care
AWARD WINNER

The Maker

Examining a Few Myths About Prescribing.



Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.

FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were not bioequivalent to a reference product. As y know, there is substanti literature on this subje affecting many drugs, i cluding such antibiotic as tetracycline and ery-thromycin. The record drug recalls and court actions affirms strongl that there are differenc among pharmaceutica companies and their products. Research-intensive companies have far better records than those that do no r search and may practi minimum quality assu ance.

MYTH: Industry favors only "expensive" brand names and denigrates al generics.

FACT: PMA companie make 90 to 95 percent the drug supply, includ ing, therefore, most of generics. Drug nomen clature is not the impo tant point; it's the com tence of the manufac-turer and the integrity the product that count

Matters.

MYTH: Generic options almost always exist.

FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.

FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

MYTH: Drugs account for a major portion of the rise in health care costs.

FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

MYTH: Government intrusions into the marketplace will save tax money.

FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal "help," such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

PMA

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

FUTURE FILE

Critical Care Symposium

A Critical Care Symposium sponsored by the Indiana Society of Internal Medicine and the Medical Education Department of St. Catherine Hospital in Lake County will be held Saturday, June 9, at the Wicker Park Pavilion in Highland, Ind.

The symposium has been certified for 8½ hours of AMA Category 1 credit. The program and luncheon are free of charge.

For information and reservations, contact the Medical Education Department of St. Catherine Hospital at 219-392-7226.

Calendar of Events

June 6—Tenth District, Hobart
June 13—Eighth District, Portland
June 14—Ninth District, Lafayette
June 17—Father's Day
June 24—Medical Services Commission
July 4—Independence Day
July 13—ISMA Annual Reports Due
July 15—Board of Trustees
July 22—AMA Scientific Meeting, Chicago

Antibiotic Review Conference

A "First National Conference on Antibiotic Review: West Coast Update" will be held Sept. 10-11 at the Bonaventure Hotel, Los Angeles. This is a second meeting of the conference for west coast physicians and those in the other portions of the country who missed the original conference because it was over-subscribed. Write to Muriel Myers, Suite 118, 67 Peachtree Park Dr., Atlanta, Ga. 30309.

AMA Combined Seminar

The AMA will conduct a combined seminar at Portsmouth, N.H. Aug. 27-Sept. 1. Two programs will be combined into "Medical Staff Leadership/Dynamics of Conflict Resolution." The registration fee for AMA members is $450, for non-members $550, and for others $600. The sessions will be at Wentworth-by-the-Sea.

Write or call the AMA Department of Negotiations, 535 N. Dearborn, Chicago 60610. Tel: (312) 751-6634.

Toxins in Human Food

"Toxins in Human Food" is the subject of a national conference scheduled for Sept. 23 - 26 in Detroit at the Radisson-Cadillac Hotel. Detailed program information and registration is available from University of Michigan Extension Service, 412 Maynard St., Ann Arbor, Mich. 48109.

Water-Related Injuries Seminar

Welborn Baptist Hospital of Evansville will sponsor a two-day seminar on water-related injuries June 23-24 at the Executive Inn, 600 Walnut St., Evansville.

The course is approved for 10 hours of Category 1 credit by the AMA; it is also approved for 10 hours of credit by the American College of Emergency Physicians, the American Academy of Family Physicians and the American Osteopathic Association. The fee for practicing physicians is $40.

To register, contact Welborn Baptist Hospital, Education Department, 401 S.E. Sixth St., Evansville, Ind. 47713. Tel: (812) 426-8235.

INDIANA MEDICAL BUREAU
1010 East 86th St.—72 Winterton
Indianapolis 46240
844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service

Dermatology

Clinical Notes

JERE D. GUIN, M.D.
Kokomo

Decubitus Ulcers

SHORTLY AFTER entering private practice, I was asked to see a patient for a local physician who had not previously referred very much to me. Full of ambition and eager to succeed, I rushed to the bedside to find a bedfast patient with many large decubitus ulcers. I still remember the frustration I felt.

There are some things that help in the management of decubitus ulcers, but there is no substitute for good nursing care and avoidance of pressure. One new development, a dextran polymer,* is used to absorb the serous and purulent exudate resulting in a decrease in bacterial load and crust formation. This enhances the formation of granulation tissue and subsequent healing. While this method helps control secondary infection, it is not adequate for primary infections, which still require supplementary treatment with antibiotics.

Following the removal of necrotic tissue by saline washing, the area is damp-dried and dextran beads are applied to the ulcer to a thickness of 3 mm or more. The ulcer is covered with a dry dressing and securely bandaged. The beads are changed when they have become moist and grayish, generally every 8 to 12 hours. The whole process is then repeated.

Dextranomer is not irritating or allergenic. However, it may cause excessive dryness in areas where the blood supply is decreased, which makes them less useful in ischemic ulcers.

This form of treatment can be used until the ulcer is entirely healed. Actually, once good granulation tissue is present, hardly anything will stand in the way of healing. The absorptive powers of dextranomer confirm the axiom that healing occurs in clean wounds.

*Debrisan® (dextranomer)

REFERENCES

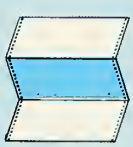
1. Pace WE: Beads of a dextran polymer for the local treatment of cutaneous ulcers. *J Dermatol Surg Oncol*, 4:9, September 1978.
2. Parish LC, Witkowski LC: Decubitus ulcers: A comprehensive study. Exhibit, Amer Acad Dermatol, San Francisco, Calif., Dec. 4-6, 1978.
3. Parish LC, Collins E: Decubitus ulcers: A comparative study. *Cutis*, 23:106, 1979.
4. Parish LC, Witkowski LC: Decubitus ulcers. *Int J Dermatol*, April 1979.

Get PAID.

Time and time again, Medical Data Systems® users report: (1) substantial reductions in outstanding accounts receivable, (2) accelerated cash flow, (3) elimination of missing charges, and (4) faster turn around on third-party claims. Data processing services are more than fancy reports. MDS can be the difference between getting paid and not getting paid. And that's a good business basic.

S-Tek Computer Services — The Data Processing Tailors

MEDICAL DATA SYSTEMS®



Call or write our Sales Department for more information.

S-Tek
COMPUTER SERVICES, INC.
P.O. BOX 328 TERRE HAUTE, IN 47808 812-232-1385

Medical Data Systems,® a registered trademark of S-Tek Computer Services Inc.

WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

CANCER CORNER

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

Update: Pap Smear, Pelvic Examination Official Policies

In response to inquiries from physicians, the question of whether or not to recommend that an annual Pap smear be taken on women who have had a hysterectomy was reviewed by the National Task Force on Uterine Cancer.

The following recommendations were made and are the official positions of the American Cancer Society as approved at the Executive Committee meeting in March 1979:

- "That the American Cancer Society should not issue a policy statement on whether or not Pap smears should be recommended for women who have had a hysterectomy. This decision should be left to the judgment of individual physicians." However, the society feels periodic pelvic examinations are still important in the care of women after hysterectomy.
- "That the American Cancer Society should issue a policy statement regarding the gynecologic surveillance of women at the menopause as follows: 'Because the Pap smear taken in the conventional manner is considered less effective than tissue examination in detecting endometrial cancer, and because *high risk* women need to be brought under some type of surveillance, every woman at menopause should have a pelvic examination and Pap smear and those at high risk should have an endometrial sample examined.'"

* * *

Update: Mass Chest X-Ray Screening

At their March 1979 meetings, the Medical and Scientific Executive Committee and the Executive Committee approved the following updated statement to replace the one issued in 1973:

"While mass chest x-ray screening of the entire population for the primary purpose of detecting lung cancer is an inefficient and extremely expensive procedure, the routine x-ray examination at annual intervals of those segments of the population in whom lung cancer is relatively frequent is desirable and may well be effective. The Society, therefore, does not endorse any effort at mass survey of the entire population, but does support x-ray of the chest of that segment of the population in which lung cancer is most often found—for example, heavy cigarette smokers and workers in the asbestos industry—and advocates the routine examination of the chest during the annual physical examination."

* * *

Re-affirmation: Heroin, Marijuana Use By Some Cancer Patients

An ad hoc committee of the Medical and Scientific Committee considered the use of heroin and marijuana for relieving pain and discomfort suffered by some patients with advanced cancer and recommended a statement, adopted by the Board of Directors Feb. 3, 1978. It was reaffirmed by the Medical and Scientific Executive Committee and the Executive Committee at their March 1979 meetings:

- "Pain is a major health problem in this country, especially the kind of pain that is sometimes encountered in patients with cancer.
- "According to experts, the treatment of pain and accompanying symptoms, i.e., fear, anxiety, depression, weakness, nausea and vomiting, needs to be considerably improved. This in spite of the fact that there are agents and techniques presently available that can provide relief for the majority of those patients; however, none of these approaches is without its shortcomings and there is always a need for improvement.
- "The American Cancer Society wishes to go on record as supporting the research of any agent or technique for which there may be evidence of a therapeutic advantage, including some currently restricted agents such as heroin, cocaine, marijuana, etc.
- "The American Cancer Society also supports the continuing education of health professionals in more effective use of what is currently available."

* * *

In Edema* or Hypertension* when potassium balance is a concern...

Potassium-Sparing

DYAZIDE®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Makes Sense

In Edema

The triamterene in 'Dyazide' limits potassium loss and provides an additive diuretic effect to that of the hydrochlorothiazide component.

In Hypertension

As the hydrochlorothiazide in 'Dyazide' lowers blood pressure, the triamterene component limits potassium loss.

Serum K^+ and BUN should be checked periodically particularly in the elderly, diabetics, and those with suspected or confirmed renal insufficiency (see Warnings). If hyperkalemia develops, substitute a thiazide alone.



Before prescribing, see complete prescribing information in SK&F Co. literature or *PDR*. A brief summary follows:

* **WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in postsympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

SK&F CO.
a SmithKline company

SK&F CO.
Carolina, P.R. 00630

When painful spasm is the presenting symptom...



...in the functional bowel/irritable bowel syndrome*

Bentyl®

(dicyclomine hydrochloride USP)

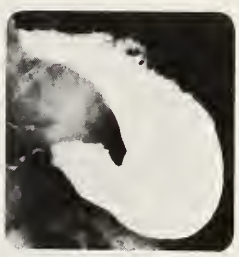
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

8-4420 (Y736A) MNR-804

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia, urinary hesitancy and retention; blurred vision and tachycardia, palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.

Usual Dosage. Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc
Cincinnati, Ohio 45215, U.S.A.

Dermatology

Clinical Notes

JERE D. GUIN, M.D.
Kokomo

Can Atopic Eczema Be Prevented?

ATOPICS WHO WHEEZE with asthma, itch with eczema or drip with hay fever have longed for a way to eliminate the curse pronounced on atopic families.

A report in LANCET offers promise for just such a plan for atopic eczema. Matthew, *et al,*[1] separated newborns with an allergic background into two groups. One group was breast-fed for at least six months and carefully avoided major allergens including dairy products, fish and eggs. Soybean formulas were used for supplementary feedings. The other group used no such precautions, but some breast-feeding occurred in over half. At six months, only 8% of those on the diet had developed eczema while 47% of the untreated group were afflicted. At one year, 13% of the treated group had eczema but the difference was still quite impressive. IgE levels were higher in the control group at six weeks but, after this, there was no difference.

Eczema patients are generally thought to have a transient IgA deficiency, which precedes reaginic allergy. Since breast-feeding provides IgA, this theoretically should help prevent atopic diseases. Matthew, *et al,* suggest that sensitization might also require E. coli endotoxin as an adjuvant. Since E. coli growth is restricted and IgA levels are supplemented in breast-fed infants, oral sensitization should then be reduced.

This work has received mixed reviews to date. The editors of the Year Book of Dermatology[2] were unimpressed. However, some experts in the field of atopic eczema say privately it is most impressive. There are so many advantages to breast-feeding infants that it seems to have again become chic to recommend this approach to prospective mothers.[3,4]

REFERENCES

1. Matthew DJ, Norman AP, Taylor B, Turner MW, Soothill JF: Prevention of eczema. *Lancet,* 321-324, February 1977.
2. Year Book of Dermatology, 1978, Malkinson FD and Pearson RE: Year Book of Dermatology. Chicago: Year Book Medical Publishers, 1978, page 85.
3. Jelliffe DB, Jelliffe EF Patrice: "Breast is best": Modern meanings. *N. Engl J Med,* 297:912-15, Oct. 27, 1977.
4. Barness LA: Breast milk for all (Editorial). *N Engl J Med,* 297:939-40, Oct. 27, 1977.

THE JOURNAL, in cooperation with the Division of Postgraduate and Continuing Medical Education of the Indiana University School of Medicine, offers its readers a Continuing Medical Education program. This is the 18th in a series of CME articles, produced by the faculty of the School of Medicine and is supported by a grant from its Division of Postgraduate and Continuing Medical Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 484.



Neonatal Seizures

CHRISTOPHER L. MEYER, M.D.[1]
RICHARD L. SCHREINER, M.D.[2]

Indianapolis

THE FIRST STEP in managing seizures in the newborn infant is to recognize them. Neonatal seizures are often difficult to recognize because they can be manifested by a wide variety of activities *(Table 1)*.

Neonatal seizures are not always the classic tonic-clonic activity. Examples of seizure activity in infants include tonic extension of a limb or body, a myoclonic jerk, clonic movements of one extremity, and an episode of limpness. Seizure activity can be very subtle, such as vasomotor changes—mottling or pallor; sudden eye opening or eye blinking; nystagmus or tonic horizontal deviation of the eyes; facial twitching; chewing, drooling or sucking motions; and abnormal cry. Apnea or transient change in respiratory rate and bradycardia can also represent seizures in the newborn.

One common problem in the recognition of neonatal seizures is differentiating them from jitteriness in a normal newborn. There are four ways to distinguish "jitters" from seizures *(Table 2)*. First, there is no abnormality of gaze or eye movement with jitteriness. "Jitters" are exquisitely stimulus-sensitive (e.g., they can be provoked by a loud noise or sudden movement), whereas seizures are not. In seizures, the predominant movement is clonic jerking, which has a fast component followed by a slow return; however, in "jitters" the movement is tremor activity, which is equally fast in both directions. Lastly, "jitters" can be stopped by passive flexion of an extremity whereas seizures are not stopped by this maneuver. In conclusion, the key to recognizing seizures in the newborn is maintaining a high index of suspicion and continuing close and careful observation of the infant.

DIFFERENTIAL DIAGNOSIS

Next in the approach to neonatal seizures is determining their cause *(Table 3)*. Metabolic disorders such as hypoglycemia and hypocalcemia should always be considered in an infant with seizures. A blood glucose of less than 40 mg% in term infants and less than 30 mg% in preterm infants should be considered abnormal and treated. Hypomagnesemia (i.e., serum magnesium <1.5 mg%) should be thought of in conjunction with hypocalcemia since hypocalcemia will often be refractile to treatment until the hypomagnesemia is corrected. Electrolyte disturbances such as hyponatremia can cause seizures also. Pyridoxine (Vitamin B_6) deficiency is a rare cause of seizures but easily treated once discovered.

Inborn errors of metabolism such as aminoaciduria should also be investigated in an infant with seizures. Characteristically, infants with inborn errors of metabolism are term healthy infants who develop problems in a few days after birth—only after feedings have begun. Problems they can develop include jaundice and hepatomegaly, vomiting and diarrhea, respiratory distress, as well as seizures. Other metabolic causes of neonatal seizures are hyperbilirubinemia and hyperthermia.

Infectious causes of seizures in the newborn, such as sepsis and meningitis, should always be ruled out. Other infectious etiologies of seizures include encephalitis and congenital infections (i.e., CMV toxoplasmosis, rubella, herpes and syphilis).

Birth trauma and neonatal asphyxia are important causes of seizures. Large infants who have had a very difficult delivery often have sustained enough cerebral trauma to

[1]Senior Resident in Pediatrics
[2]Associate Professor of Pediatrics

From the Section of Neonatal-Perinatal Medicine, Department of Pediatrics, Indiana University School of Medicine and the James Whitcomb Riley Hospital for Children, Indianapolis.

Correspondence and requests for reprints: Richard L. Schreiner, M.D., Department of Pediatrics, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis 46223.

TABLE 1

Neonatal Seizures—Types

Tonic-clonic classical convulsion
Tonic extension of limb or body
Myoclonic jerk
Clonic movements of one extremity
Episode of limpness
Apnea or transient alteration of respiratory rate
Tremors
Vasomotor changes (mottling, pallor)
Sudden eye opening or eye blinking
Nystagmus or tonic horizontal deviation of eyes
Facial twitching
Chewing or sucking motions
Drooling
Abnormal cry

TABLE 2

Distinction of Jitteriness from Seizure

No abnormality of gaze or eye movement
Exquisitely stimulus-sensitive
Predominant movement *tremor, not clonic jerking*
Usually ceases with passive flexion

precipitate seizures. Infants who develop seizures secondary to neonatal asphyxia have a very poor prognosis. These infants are often meconium stained, have low Apgars, require extensive resuscitative efforts and begin having seizures within a few hours (eight to 24) after birth. Paramount to the treatment of seizures secondary to birth trauma or neonatal asphyxia is prevention. Careful obstetrical management is needed to recognize fetal distress during labor and to identify those infants who will have difficulties during delivery. In turn, the physician must be prepared in the delivery room for aggressive resuscitative measures with the depressed infant to prevent further hypoxic injury. Developmental anomalies of the brain, such as encephalocele and cysts, cause neonatal seizures too.

In recent years, polycythemia is being recognized more frequently as a cause for seizures in infants. Polycythemia or hyperviscosity is defined as a venous (not heelstick) hematocrit reading of >60-65%. Infants who are symptomatic can present with respiratory distress, cardiomegaly and neurologic signs such as lethargy, poor feeding or irritability in addition to seizures. Hyperviscosity is often seen in infants of diabetic mothers and SGA infants. Treatment of hyperviscosity in an infant consists of a partial exchange transfusion (in small increments, 5-20 ml), using fresh frozen plasma or 5% albumin in exchange for blood in order to decrease the hematocrit reading to less than 60%:

$$\text{Volume of exchange} = \frac{\text{blood volume} \times (\text{observed Hct} - \text{desired Hct})}{\text{observed Hct}}$$

For example, if a 3.0 kg (blood volume 80 ml/kg) infant has a venous Hct of 70%, the total amount of blood that should be withdrawn to reduce the Hct to 55% is

$$3 \text{ kg} \times 80 \frac{\text{ml}}{\text{kg}} \times \frac{(70\%-55\%)}{70\%}$$
$$= 240 \text{ ml} \times \frac{15\%}{70\%} = 51 \text{ ml}$$

Therefore, a total of 51 ml blood should be withdrawn in 10-15 ml increments and replaced with the same amount of 5% protein solution. As a general rule, if the volume of blood calculated for a *full term* infant is less than 50 ml or greater than 100 ml, check your calculations—they're probably in error. Of course, for a premature infant these minimum and maximum numbers would be correspondingly smaller.

Seizures can also be observed in infants experiencing drug withdrawal from maternal addiction. Other signs of withdrawal in these infants include yawning, sneezing and a stuffy nose; agitation, irritability and tremors; fever and sweating; respiratory distress; and GI disturbances such as poor feeding, vomiting and diarrhea. Signs of drug withdrawal may not be evident until after several days to a week of age. Treatment of these infants consists of correcting fluid and electrolyte imbalances; giving paregoric, 5-8 drops q4h, or chlorpromazine, 0.75 mg/kg q6h; and controlling seizures, if present. Treatment must be maintained for 20-45 days. Drugs implicated in withdrawal are morphine, Demerol (meperidine hydrochloride), heroin, methadone, phenobarbital, Darvon (propoxyphene hydrochloride), Doriden (glutethimide NF), Librium (chlordiazepoxide), Talwin (pentazocine hydrochloride), amphetamines and phenothiazines. It must be remembered that drug withdrawal can be seen in infants of any socioeconomic status, not just infants of lower

TABLE 3

Causes of Neonatal Seizures

- Metabolic
 - *Hypoglycemia
 - *Hypocalcemia
 - Hypomagnesemia
 - Pyridoxine (B_6)
 - Hyponatremia and hypernatremia
 - Aminoaciduria, other inborn errors of metabolism
 - Increased bilirubin
 - Hyperthermia
- Infection
 - *Sepsis
 - *Meningitis
 - Encephalitis
 - Congenital
- *Bleeding
 - Subarachnoid hemorrhages
 - Periventricular and intraventricular bleeding
- *Developmental anomalies
- *Trauma
- *Asphyxia
- *Polycythemia
- *Drugs
 - Withdrawal
 - Signs of withdrawal
 - Agitation, tremors, abrasions
 - Yawning
 - Sneezing, stuffy nose
 - Fever, sweating
 - Seizures
 - GI (feeding problems, vomiting, diarrhea)
 - Respiratory distress
 - Drugs involved in withdrawal
 - Morphine
 - Demerol
 - Heroin
 - Methadone
 - Phenobarbital
 - Darvon
 - Doriden
 - Librium
 - Talwin
 - Amphetamines
 - Phenothiazines
 - Toxicity
 - Paracervical

*Common causes

socioeconomic status.

Drug toxicity is infrequent, but can cause seizures in the newborn. Seizures due to drug toxicity may occur within the first few hours of life. In mothers who have received a paracervical block, there may be sufficient absorption and transplacental passage of the local anesthetic agent, such as lidocaine, to be toxic to the infant; or the agent may be accidentally injected directly into the infant's scalp and produce toxicity.

Intracranial hemorrhage is another important cause of neonatal seizures. Intracranial hemorrhage can be classified into three types: subdural, subarachnoid and intraventricular. Subdural hemorrhage is usually seen in large, full term infants whose delivery was traumatic. Seizures secondary to subdural hemorrhage usually occur within the first 48 hours of life. Due to improved obstetrical techniques, subdural hemorrhages are now uncommon. Subarachnoid hemorrhage is the most common type of intracranial hemorrhage. It is usually seen in premature, but also in full term infants. Typically, seizures occur the second day of life. The infant may be symptomatic and exhibit lethargy, irritability as well as seizures; however, often the infant is healthy and asymptomatic. Fortunately, subarachnoid hemorrhage produces very little sequelae.

Prior to the development of the CAT scan, intraventricular hemorrhage was always thought to be associated with an extremely poor prognosis. It was seen in prematures almost exclusively and was always the consequence of a hypoxic event that the infant sustained. Seizures began anywhere from a few hours to 48 or 72 hours after the hypoxic insult. Preterm infants with intraventricular bleeds usually underwent catastrophic deterioration over a few hours to days and most died; those that did not die developed major sequelae--severe hydrocephalus and mental retardation. Increased use of CAT scanning, however, has demonstrated that there are varying degrees of intraventricular hemorrhage, ranging from very mild to very severe; and that intraventricular hemorrhage is more frequent than had been previously suspected. A few studies have shown that many preterm infants with mild degrees of intraventricu-

TABLE 4

Workup of Seizures

History and physical examination
Transillumination
Blood for glucose, calcium, sodium, magnesium, hematocrit and culture
LP for cells, glucose, protein, culture
CAT scan
EEG
Urine and blood for metabolic screen (amino acids, organic acids, ketones)
Skull x-ray
TORCH culture and titers

lar hemorrhage have been relatively asymptomatic, and a surprising number have gone on to have normal development. Therefore, the incidence and prognosis of intraventricular hemorrhage are subject to change as more studies using CAT scanning in prematures become available.

In review, a list of the more common and important causes of neonatal seizures are as follows: asphyxia and trauma, hypocalcemia and hypoglycemia, infection, intracranial hemorrhage, hyperviscosity, developmental anomalies, and drugs.

LABORATORY EVALUATION

The workup of an infant with seizures must be systematic *(Table 4)*. It is more important to diagnose the cause and correct it, if possible, than to simply give phenobarbital and Dilantin (phenytoin sodium). A complete and thorough history and physical exam is needed. Transillumination of the skull should be included in the physical exam. Blood should be sent quickly for glucose, calcium, magnesium, sodium, hematocrit and culture. A spinal tap should always be done on any infant with seizures and fluid sent for glucose, protein, cell count and culture.

Specific drug therapy for seizures can then be tried (*Table 5*). Intravenous glucose (i.e., 2-4 ml/kg of $D_{10}W$ to $D_{25}W$) should be given immediately after blood is sent to the lab for chemistries, not waiting for the results. For hypocalcemia, 0.5-2 ml/kg of 10% calcium gluconate can be given by slow IV push, being careful to monitor the infusion with an EKG. Hypomagnesemia can be corrected with 3% magnesium sulfate, 2-6 ml IV slow push. Intravenous antibiotics should be started on any infant with seizures as soon as cultures of blood and spinal fluid are obtained.

Anticonvulsant therapy *(Table 5)* consists of phenobarbital and, if necessary, Dilantin. An IV slow push, 10 mg/kg of phenobarbital, is used to stop seizures; this may be repeated if necessary. Maintenance phenobarbital is 5-10 mg/kg day orally. Dilantin may be added if seizures are not controlled by phenobarbital alone. An initial dose of Dilantin 10 mg/kg IV may be given and repeated if necessary to stop seizures. Maintenance Dilantin therapy is 5-10 mg/kg/day orally. Anticonvulsant levels must be monitored when using phenobarbital and Dilantin. Therapeutic ranges are 15-30 mcg/ml for phenobarbital and 10-20 mcg/ml for Dilantin. Valium 0.25-0.5 mg/kg IV slow push has been used to control seizures, but its duration of action is approximately 30 minutes; hence, it gives only temporary control of seizures and is not recommended

TABLE 5

Treatment of Seizures

Drug—specific
Glucose (2-4 ml/kg 10-25% D_5W IV) *immediately* after blood sent to lab, before results back
Calcium gluconate (.5-2 ml/kg 10%, slowly IV with EKG)
Magnesium sulfate, 3% 2-6 ml IV
?B_6 (Pyridoxine), 20-50 mg IV

Anticonvulsant therapy:

Drug	*Initial Intravenous*	*Oral Maintenance*
Phenobarbital	10 mg/kg Repeat if necessary	Start 5-10 mg/kg/day
Diphenylhydantoin (Dilantin) (rarely needed)	10 mg/kg Repeat if necessary	5-10 mg/kg/day

Need to monitor blood levels of both drugs. Therapeutic levels approximately 15-25 mcg/ml.

for maintenance anticonvulsant therapy. Other supportive measures of infants with seizures include IV fluids and careful monitoring of cardiorespiratory status.

Once the infant is stabilized, further investigation of seizures can be done, such as EEG, skull x-rays, CAT scan, urine and blood for metabolic screen (amino acids, organic acids and ketones), TORCH cultures and titers, i.e., congenital infection screen.

Prognosis of neonatal seizures varies with the specific cause. The prognosis of seizures secondary to correctable causes such as hypoglycemia, sepsis, hyperviscosity and drug toxicity depends upon how quickly the cause is treated. Seizures secondary to asphyxia or developmental anomalies have an extremely poor prognosis. Infants with seizures secondary to hypocalcemia have a 50% chance for normal development. Of infants with seizures secondary to bacterial meningitis, 15-35% will be normal in long term follow-up, although more recent data suggest the chance for normal development is higher, 50-80%. Infants with subarachnoid hemorrhage and seizures have a very good prognosis. As stated previously, the views on prognosis of infants with intraventricular hemorrhage are changing, so that the chance for normal development of such infants is no longer zero.

In summary, the clinical approach to infants with seizures is different than the approach to older children or adults with seizures. Efforts should be directed toward discovering and treating those causes that are correctable or preventable.

REFERENCES

1. Pettid FJ, Brown JR: Detecting neonatal seizures. *Consultant,* pp 43-47, August 1976.
2. Snodgress, GJAI: Seizures in newborn infants. *Dev Med Child Neurol,* 16:92-94, 1974.
3. Keen JH, Lee D: Sequelae of neonatal convulsions—Study of 112 infants. *Arch Dis Child,* 48:542-546, 1973.
4. Freeman JM: Neonatal seizures—Diagnosis and management. *J Pediatr,* 77:701-708, 1970.
5. Volpe JJ: Neonatal seizures. *Clin Perinatol,* 4:43-63 (#1), 1977.

BEFORE YOU BUY OR LEASE, CONSULT WITH DAVE WAITE LEASING

At Dave Waite Leasing you will find all kinds of new automobiles and trucks on display for immediate delivery.

With rising automobile costs, before you buy, you must consider leasing whether it is for business or personal use. Consider that you can lease:

Gas-saving Compacts as little as **$110*** Sporty Intermediates as little as **$130*** Lease a Luxury car as little as **$160***

*per month, for 36 month, (incl. tax)

Before you buy or lease, consult with us. Dave Waite Leasing is the leader and specialist.

Dave Waite Leasing

1040 N. Meridian/634-5046 • 5350 N. Keystone/253-1501
3421 U.S. 31 South/788-1571 • 4809 W. 38th/298-7680

R. JOE NOBLE, M.D.
D. E. SCHWARTEN, M.D.
EDWARD F. STEINMETZ, M.D.
J. STANLEY HILLIS, M.D.
St. Vincent Hospital and Health Care Center
Indianapolis



THE FIVE FINGERS OF CARDIOLOGY

The patient is a 45-year-old gentleman with rheumatic heart disease, who has taken 0.25 mgs. digitoxin each day. Upon admission to the hospital, he develops severe abdominal pain, characterized as a constant, boring mid-epigastric and peri-umbilical pain. Bowel sounds are absent. There are no other peritoneal signs. There is no stool. The white count is normal. An abdominal angiogram is displayed in *Figure 1*.

QUESTION:

What is the mechanism for the pain? What is the underlying pathophysiology? What therapy is available?



FIGURE 1

A Self-Assessment

ANSWER:

The angiogram demonstrates severe mesenteric vasospasm with resultant diminished blood flow to the bowel. There are two possible explanations for the vasospasm: (1) digitalis excess,[1] and (2) diminished cardiac output. It is likely that both conditions contributed to this patient's vasospasm.

A vasodilator should relieve the vasospasm, increase mesenteric blood flow, and thereby relieve the patient's abdominal pain. With intravenous nitroprusside, the vasospasm was relieved, as demonstrated in *Figure 2*.

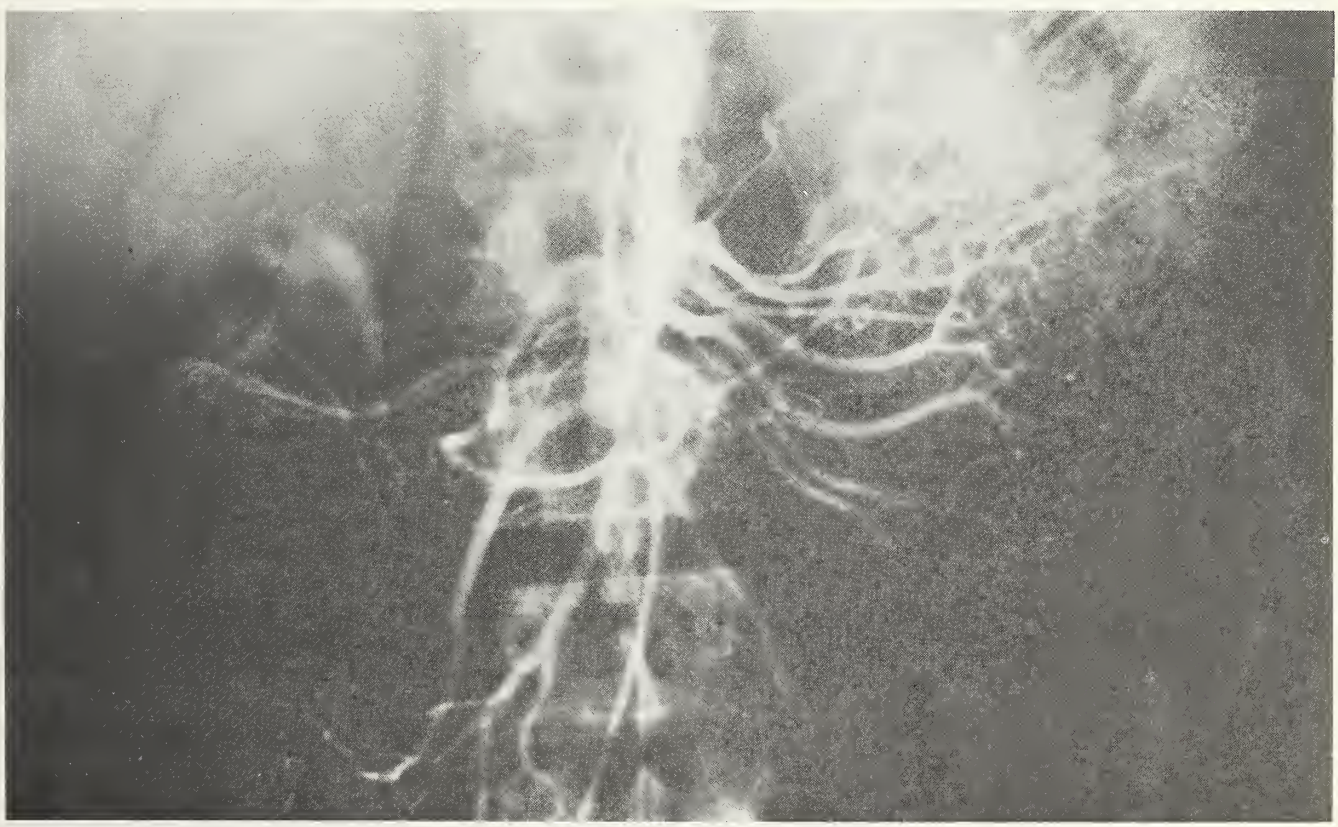
The patient subsequently did well, though bloody diarrhea did follow, along with mild leukocytosis. On a later date, when the nitroprusside infusion was discontinued, the pain and abdominal findings recurred, until the infusion was reinitiated.

In summary, severe mesenteric vasospasm may result from digitalis excess in patients whose cardiac output is diminished. Abdominal angiography confirms this diagnosis. Vasodilators, like nitroprusside, are indicated to dilate the vessels prior to irreversible bowel necrosis.

REFERENCE

1. Levinsky RA, Lewis RM, Bynum TE, Hanley HG: Digoxin induced intestinal vasoconstriction: Effects of proximal arterial stenosis and glucagon administration. *Circulation* 52:130-136, 1975.

FIGURE 2



The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac-diagnosis.

Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.

Two Applications of the Law of LaPlace to Obstetrics

RICHARD J. NOVEROSKE, M.D.
Evansville

WHILE WORKING with the Law of LaPlace, as applied to cylinders for the problem of perforation of the colon, I realized that it applies to a couple of clinical situations that are met in obstetrics.

The Law of LaPlace, as applied to cylinders, states that the tension that tends to tear apart the wall of a cylinder is the product of the pressure times the radius. The greater the radius, even though the pressure is the same, the greater the tension *(Illustration)*.

The pregnant uterus at term has a smaller diameter in its lower uterine segment than it does in its upper segment. Experience has shown that incisions for Cesarean Sections are safer, i.e., less likely to rupture during a subsequent pregnancy, if they are made in the narrower, lower uterine segment, rather than in the larger upper part of the uterus.

It isn't generally appreciated, though, that the reason for this improved safety with lower uterine segment incisions is the narrower diameter of the uterus on cross section in the lower segment.

The decreased diameter and therefore decreased radius, when multiplied by the same intrauterine pressure, produces less tension that tends to tear apart the uterine wall than the same pressure produces in the large-calibered upper uterine segment. If, for example, the radius of the lower uterine segment is half of the radius of the upper uterine segment, the tension is half of what

The author is a 1955 graduate of the Indiana University School of Medicine. Certified by the American Board of Radiology, he is a member of the Radiological Society of North America, the International College of Surgeons and the American Roentgen Ray Society.

The accompanying illustration of the Law of LaPlace is reproduced from the AMERICAN JOURNAL OF ROENTGENOLOGY with permission.

it is in the upper uterus. This application of the Law of LaPlace explains why lower uterine segment Cesarean Sections are safer.

The other application of the Law of LaPlace to obstetrics concerns the involuntary bearing down that the woman has at the end of the first stage of labor. The uterine contractions are accompanied by an almost reflex need of the woman to bear down with her voluntary abdominal muscles. Why?

Because as the cervix is dilated and its internal radius increases, the tension in its wall increases, even though the intrauterine pressure may remain the same, because the tension that tends to tear apart the wall of the cervix is a product of the pressure in the uterus times the radius of the birth canal *(Illustration)*.

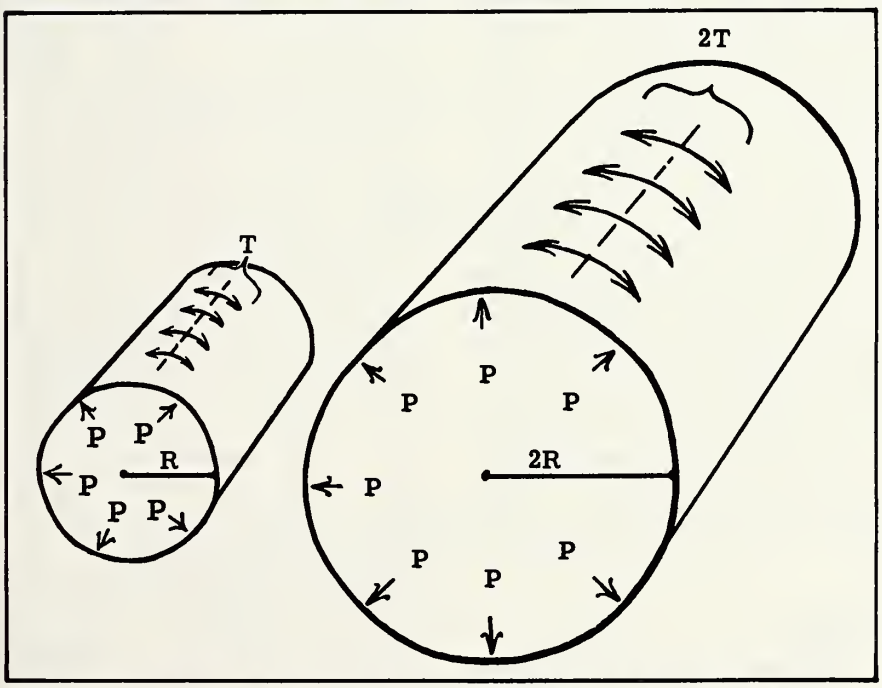
This tendency for the wall of the birth canal to be torn apart by the increased tension is sensed and, by reflex, is splinted by increased intra-abdominal pressure from contraction of the voluntary muscles. The increased intra-abdominal pressure splints the uterus by making the change in pressure across the uterine wall approach zero; the intramural pressure, or pressure change across the wall of the uterus, can be brought to near zero if the increased pressure from inside the uterus due to uterine contractions is balanced by increased pressure from outside the uterus from straining.

It helps to visualize this phenomenon of intramural pressure by taking a piece of tissue paper, laying it on a table, and trying to poke a hole in it with a finger. You can't do it; there is little change in pressure across the fabric of the tissue; the table top pushes back against your finger as hard as you press against it through the tissue. With essentially no change in pressure through the fabric of the tissue, there is no intramural pressure change in the tissue, and no disruptive force on it. But try poking a hole in the tissue when someone holds it for you in the air. Your finger goes right through the tissue then; the intramural pressure across the tissue is high; there is no resistance from the air on the other side to the perforating finger; the change in pressure across the wall of the tissue is higher than the tissue fabric can tolerate.

So the increased abdominal pressure from bearing down at the end of the first stage of labor acts like the tabletop pressing back through the tissue against the finger pressure; it nullifies the pressure from within the uterus, and makes the change in pressure across the wall of the uterus, the intramural pressure, approach zero.

This reflex splinting mechanism is particularly needed when the birth canal approaches its greatest diameter, because of the increased tension in the wall of the uterus then *(Illustration)*.

Understanding the Law of LaPlace and the significance of intramural pressure changes make these two commonly recognized clinical events more clear.



The Law of LaPlace as applied to cylinders: Increasing the radius increases the tension in the wall of the cylinder, even though the pressure remains the same; doubling the radius doubles the tension.

Risk of Cytomegalovirus Exposure to Staff in a Preschool for the Retarded

KAY S. BROWNE, M.D.
GABRIEL J. ROSENBERG, M.D.
Indianapolis

From the Department of Medical Research, Methodist Hospital of Indiana, Inc., 1604 N. Capitol Ave., Indianapolis 46202.

Acknowledgement for significant involvement:
Noble Industries Division of
Marion County
Association for Retarded Citizens
2400 N. Tibbs Ave.,
Indianapolis, Ind. 46222

Mr. Charles Griffin
State Board of Health, Virus Division
1530 W. Michigan St.,
Indianapolis, Ind. 46206

DURING 1977, two children older than one year with proven congenital cytomegalic inclusion disease were admitted to a nonresidential preschool for the retarded. The school (Noble School, Marion County Association for Retarded Citizens) takes children aged six months to five years for a five-day school week. The admission of the two children, coupled with the presence of pregnant personnel in the preschool, gave rise to the expression of much staff concern despite proven negative viral urine cultures on the children prior to school entry. This study was designed to ascertain degree of exposure risk to staff members working in such a setting.

DESIGN

Twenty-four staff members (two male, 22 female) who had close exposure to the preschool children and had worked at the school an average of three years (none less than six months) comprised the study group. A control group matched for age (± five years), parity and sex, but without this preschool exposure was selected individually by the index individuals or the investigator *(Table 1)*. Each person participating in the study gave informed consent.

Determination of the presence of cytomegalovirus antibodies at 1/2 dilution was done on a single serum sample from each study individual. These samples were all drawn within two weeks of each other, refrigerated until separated and then frozen until tested. All samples were identified by number and initials. Antibody presence was determined at the Indiana State Board of Health, using the Laboratory Branch Complement Fixation Method (LBCF). All results were repeated once and all positives were repeated with CMV antigen and normal control.[9]

RESULTS

Of the 24 staff individuals attending the preschool, 13 had positive evidence of CID exposure. When compared with the 10 of 24 control group individuals with positive titers, the difference was not statistically significant *(Table 2)*. In contrast, when presence of positive titers was compared by age, dividing the group into those 31 years and younger and 32 years and older, results showed a statistically significant ($p < .01$) greater number in the older group with positive titers *(Table 3)*. When parity was used (those with pregnancies vs. those not) the difference was also statistically significant; those pregnant had a greater percentage of positive titers ($p < .05$) *(Table 4)*.

TABLE 1
Comparison Between Control & Index Group

	Number	Age-Average	Number With Pregnancies	Parity	Males
Control	24	30	8	19.5	2
Index	24	32	8	28	2

TABLE 2

	N	Positive	%
Control	24*	10	.42
Index	24	13	.54

*Difference not statistically significant with N = 24.

TABLE 3
Positive Titers by Age (Average Group Age 31 or 32)

	N	Positive	%
31 & Younger	35	12	.34
32 & Older	13	11	.35

$p < .01$

TABLE 4
Positive Titers by Pregnancy (Only Females)

	N	Positive	%
Pregnancy	16	12	.75
Nulliparous	28	10	.36

$p < .05$

However, the average age of those with pregnancies was considerably more than those without (46 years vs. 26 years), therefore making it uncertain whether pregnancy or age is responsible for increased positive titers in this group.

DISCUSSION

It has been shown that mothers infected with cytomegalovirus during pregnancy may produce offspring actively infected with the virus; the offspring may be retarded and microcephalic, and may have other stigmata of congenital cytomegalic inclusion disease.

Previous evidence has suggested that these children can be infectious to those intimately in contact with them, both family members and other children,[6] for prolonged periods of time. It is, therefore, reasonable to assume that staff working in a preschool for the retarded are at increased risk for exposure to this virus. This is especially true in this school, where at any one time approximately 140 preschoolers are enrolled ranging in age from six months to 5 1/2 years and where staff are in very intimate contact, i.e., diaper changes, swimming, and feeding. Thus, it is surprising that the percentage of positive titers was only slightly and not significantly raised in this staff and that the percentage for the total 48 is comparable to the percentage of positive titers determined to be that in the general population by previous studies. In fact, this percentage, 80%, is lower than that previously determined in one other study.[6]

The other results of increase in positive titer with age and parity are not surprising. The age relationship is probably the most significant and pregnancy only secondarily related (the older the person, the more likely to have pregnancies). It is still important to note that previous studies suggest an increased

risk of contacting viruses of the herpes group during pregnancy.[7] Consequently, this relationship of pregnancy to percentage positive CID titers may be a true one.[5]

SUMMARY

With the increased concern about the cytomegalovirus causing "silent" neurologic damage later as expressed in learning problems, visual disturbances or other neurologic complications, it is important that more be learned about the epidemiology of this virus so as to minimize exposure to pregnant women.[1] This is particularly important since the presence of a positive titer in a woman prior to pregnancy has not been shown to be protective against the production of an "infected" though possibly not "affected" child.[2,3,4,8]

REFERENCES

1. Auditory and visual defects resulting from symptomatic and subclinical congenital cytomegaloviral and toxoplasma infections. *Pediatrics,* 59:5, 669-678, May 1977.
2. Yeager, *et al*: Congenital cytomegalovirus infection outcome for the subsequent sibling. *Clin Pediatr (Phila),* 16:5, 455-458, May 1977.
3. Euebil JA, Ozene RH, Haldane EV: Congenital cytomegalovirus infection in two siblings from consecutive pregnancies. *J Pediatr,* 77:417, 1970.
4. Krech V, Kinjajev Z, Jung M: Congenital cytomegalovirus infection in siblings having consecutive pregnancies. *Helv Paediatr Acta,* 26:355, 1971.
5. Occurrence of genital herpes simplex and cytomegalovirus infections in pregnancy. *Acta Obstet Gynecol Scand,* 56:2, 101-104, 1977.
6. Henshaw JB: *Pediatr Clin North Am,* 13:2, 279-293, May 1966.
7. Kuskimies O, *et al:* Risk indicators for congenital malfunctions. *Pediatrics,* 61:6, 832-838; Genital herpes simplex infection: Virologic and cytologic studies. *Obstet Gynecol,* 29: 395, 1967.
8. Stagrio S, Reynolds DW, Labanan A, Charamella LJ, Alfuda A: Congenital cytomegalovirus infection.
9. Antibody determination. Charles Griffin, Indiana State Board of Health. *U.S. Department of Public Health Monograph 74.*
10. Henshaw JB, Betts RF, Simon G, Bayuton RC: Acquired cytomegalovirus infection: Association with hepatomegaly and abnormal liver function tests. *N Engl J Med,* 272: 602, 1965.
11. Berenberg W, Naukewis G: Long term follow-up of cytomegalic inclusion disease of infancy. *Pediatrics,* 46:403, 1970.

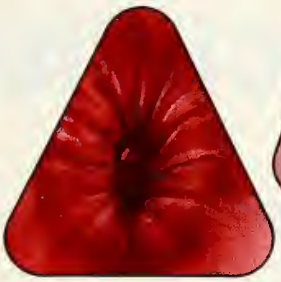
★
Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
Since 1899
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
Suite 624, 6100 North Keystone Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indianapolis 46220
Northern Indiana Office: Douglas O. Sellon, Representative
120 LaSalle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332

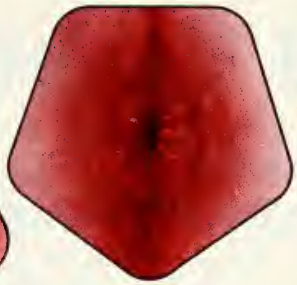
For hemorrhoids and other anorectal conditions



External hemorrhoids



Internal hemorrhoids



Pruritus ani



Proctitis



Anal fissures



Easy to handle, easy to insert, comfortably shaped—Rx only

Easy to apply, nonstaining—Rx only

Prescribe Anusol-HC®

Suppositories/Cream

for symptomatic relief

Effectively reduces inflammation and edema
Rapidly relieves pain and itching

ANUSOL-HC® SUPPOSITORIES
Hemorrhoidal Suppositories
ANUSOL-HC® CREAM
Rectal Cream with Hydrocortisone Acetate
CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg; bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian balsam, 18.0 mg; zinc oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani.

Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: Anusol-HC® Suppositories and Anusol-HC® Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24); in silver foil strips with Anusol-HC W/C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01); with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F.)

Full information is available on request.

Warner/Chilcott
Division, Warner-Lambert Company
Morris Plains, N.J. 07950

AN-GP-91

The professional source of anorectal comfort

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
112B - 16th Street
Bedford, Indiana 47421
(812) 275-749B

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company

1979 Yearbook

June 1979 • Vol. 72 • No.6

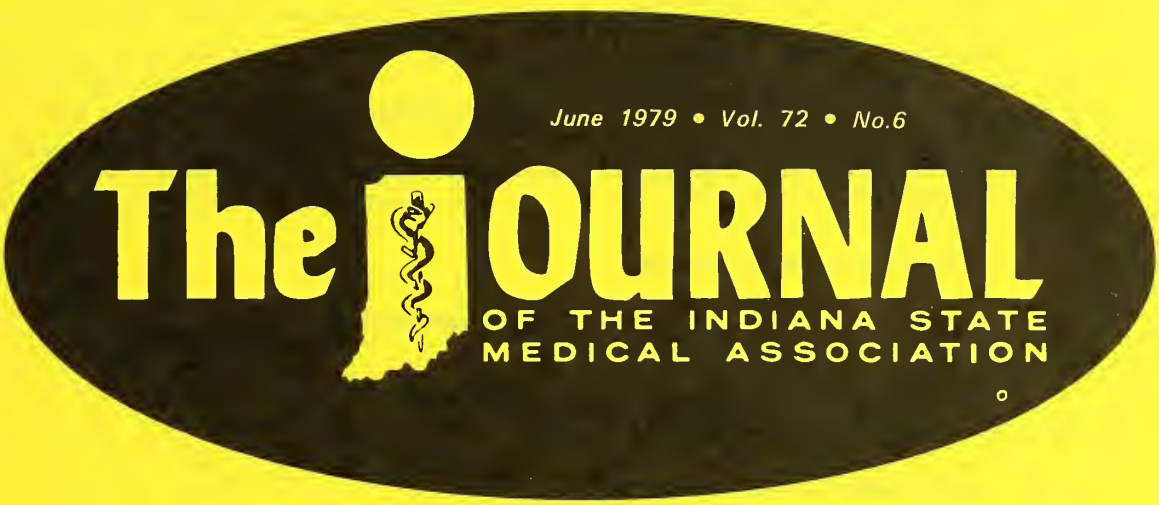


Table of Contents

425 Indiana Delegation in Congress; State Officials

426 State Health Organizations

431 Professional Medical and Allied Organizations

434 Voluntary Health Agencies

436 Community Mental Health Services

438 Medically Oriented Rehabilitation Centers

438 Licensed Hospitals

443 Ambulatory Outpatient Surgical Centers

443 Federally Approved Home Health Services Agencies

445 Independent Laboratories in the Medicare/Medicaid Program

447 Community Agencies for the Mentally Retarded and Other Developmentally Disabled

449 Indiana Licensed Health Facilities

459 Indiana University School of Medicine (Department Heads)

460 Accredited Schools of Professional Nursing

461 Accredited Schools of Practical Nursing

462 Ivy Tech Health Occupation Courses

463 Official Yellow Fever Vaccination Centers

464 Disease Prevention by Immunization and Chemoprophylaxis

470 Poison Information Centers in Indiana and Adjacent States

472 Indiana State Medical Association Auxiliary

473 ISMA Officers, Trustees and Section Officers

474 Committees and Commissions

475 County Medical Society Directory

476 Membership Report for 1978

477 Deaths of Indiana Physicians in 1978

478 Presidents of ISMA Since Its Organization

Indiana Delegation in Congress

UNITED STATES SENATORS

Senior Senator—Hon. Birch E. Bayh, Jr.
(D) 2919 Garfield St. N.W., Washington
363 Russell Office Bldg., Washington 20510
416 Federal Bldg., Indianapolis 46204

Junior Senator—Hon. Richard G. Lugar
(R) 5107 Dirksen Bldg., Washington 20510
46 East Ohio St., Indianapolis 46204

UNITED STATES REPRESENTATIVES

First District—Hon. Adam Benjamin, Jr.
(D) 306 Federal Bldg., 610 Connecticut, Gary 46402
410 House Cannon Bldg., Washington 20515

Second District—Hon. Floyd Fithian
(D) 5 N. Earl Ave., Lafayette 47902
129 House Cannon Bldg., Washington 20515

Third District—Hon. John Brademas
(D) 203 Federal Bldg., South Bend 46601
1236 Longworth Bldg., Washington 20515

Fourth District—Hon. J. Danforth Quayle
(R) 326 Federal Bldg., Fort Wayne 46802
1407 Longworth Bldg., Washington 20515

Fifth District—Hon. Elwood Hillis
(R) 504 Union Bank Bldg., Kokomo 46901
2429 Rayburn Bldg., Washington 20515

Sixth District—Hon. David W. Evans
(D) P.O. Box 41709, Administration Bldg., Indianapolis International Airport, Indianapolis 46241
438 Cannon Office Bldg., Washington 20515

Seventh District—Hon. John T. Myers
(R) 107 Federal Bldg., Terre Haute 47808
2301 Rayburn Bldg., Washington 20515

Eighth District—Hon. Joel Deckard
(R) 210 S. E. 6th, Evansville 47708
507 House Cannon Bldg., Washington 20515

Ninth District—Hon. Lee H. Hamilton
(D) 2336 Sycamore, Columbus
2470 Rayburn Bldg., Washington 20515

Tenth District—Hon. Philip R. Sharp
(D) Federal Bldg., 40 S. High St., Rm 10, Muncie 47305
121 Longworth Office Bldg., Washington 20515

Eleventh District—Hon. Andrew Jacobs, Jr.
(D) 441-A Federal Bldg., 46 East Ohio St., Indianapolis 46204
1533 Longworth Bldg., Washington 20515

State Officers

Office	Incumbent	Politics	Room Number
Governor	Otis R. Bowen, M.D.	R	206
Lieutenant Governor	Robert Orr	R	333
Secretary of State	Ed Simcox	R	201
Treasurer of State	Julian L. Ridlin	R	242
Auditor of State	Charles Loos	R	240
Attorney General	Theodore L. Sendak	R	219
Supt. of Public Instruction	Harold H. Negley	R	227
Clerk of Supreme Court	Marjorie O'Laughlin	R	217
Reporter of Supreme Court and Appellate Court	Marilou Wertzler	R	416

State Health Organizations

State Board of Health

1330 W. Michigan St., Indianapolis 46206

(Unknown at press time), Secretary and State Health Commissioner
Robert O. Yoho, H.S.D., Deputy Commissioner for Administration
Ralph C. Pickard, Assistant Commissioner for Environmental Health
David J. Edwards, M.D., Assistant Commissioner for Medical Operations
Thomas H. Dorsey, Director, Division of Grants and Special Projects

State Board of Health

William J. Miller, M.D., Lafayette, Chairman
Eva H. Rosser, R.N., Fort Wayne, Vice-Chairman
Raymond W. Worley, D.V.M., South Bend
Don E. Bloodgood, B.S.C.E., C.E., West Lafayette
Joseph E. McSoley, R.Ph., Indianapolis
Francisco F. Levinson, D.D.S., Griffith
Donald M. Kerr, M.D., Bedford
John O. Butler, M.D., Indianapolis
Michael H. McDermott, Jasper

State Health Planning and Development Agency (Governor's Executive Order 6-76)

(Unknown at press time), State Health Commissioner and Director, State Health Planning and Development Agency
George F. Leamnson, Director, Health Planning and Development Bureau

Members
Don E. Bloodgood, B.S.C.E., C.E., West Lafayette
John O. Butler, M.D., Indianapolis
Michael H. McDermott, Jasper
Donald M. Kerr, M.D., Bedford
Francisco F. Levinson, D.D.S., Griffith
Joseph E. McSoley, R.Ph., Indianapolis
William J. Miller, M.D., Lafayette
Eva H. Rosser, R.N., Fort Wayne
Raymond W. Worley, D.V.M., South Bend

Bureau of Administration and Development

Elizabeth A. Jones, Director
James R. Alley, Director, Division for the Handicapped
Robert A. Calhoun, P.E.D., Director, Division of Public Health Records
Roger F. McClain, Director, Division of Health Education
Helen L. Scheibner, H.S.D., Director, Division of Local Health Services

Bureau of Engineering

Oral H. Hert, Director
Chester H. Canham, Director, Division of Sanitary Engineering
Earl H. Bohner, Director, Division of Water Pollution Control
Harry D. Williams, Director, Division of Air Pollution Control
Virgil J. Konopinski, Director, Division of Industrial Hygiene & Radiological Health

Bureau of Fiscal and Systems Management

Edison L. Thuma, Director
William E. Headley, Director, Division of Budget and Requirements
Thomas W. Leatherman, Director, Systems and Data Processing
C. R. Powers, Director, Division of Personnel and Training

Bureau of Food and Drugs

H. H. Vaux, Director
Robert W. Walker, Director, Division of Weights and Measures
Dale Hardy, Director, Division of Retail and Manufactured Food
Willis A. Roose, Director, Division of Drug Control
I. Dale Richardson, D.V.M., Director, Division of Meat and Poultry
Donald R. Kimball, Director, Division of Dairy Products

Bureau of Laboratories

Josephine Van Fleet, M.D., Director
Tinsel L. Eddleman, Assistant Director
Lawrence Sullivan, Director, Division of Food, Drug, and Dairy
Charles F. Hill, Director, Division of Serology
Stephen R. Kin, Director, Division of Water and Sewage
Kathleen Harper, Director, Division of Microbiology
Charles Griffin, Director, Division of Virology

Bureau of Management and Services

William D. Murchie, Director
William D. Murchie, Acting Director, Division of Administrative Services

Indiana School for the Blind—Indianapolis
D. A. Hutchinson, Superintendent
James E. Haralson, Principal
William Hutchinson, Business Administrator
Advisory Committee
Edwin W. Dyar, M.D., Indianapolis
Thomas C. Hasbrook, Indianapolis
Clarence Lucas, Jr., M.D., Indianapolis
Mrs. Robert Reed, Indianapolis
Mrs. Leroy Shine, Fort Wayne
Mrs. Frank A. White, Indianapolis

Indiana State School for the Deaf—Indianapolis
Alfred J. Lamb, Superintendent
Jess Smith, Principal
Advisory Committee
Jack D. Summerlin, M.D., Indianapolis
Dalton O. O'Connor, Fort Wayne
Joseph D. Geeslin, Jr., Indianapolis
J. Robert Galyean, Richmond
Mrs. Lester Menke, Elberfeld
Jess M. Smith, Indianapolis

Indiana State Veterans' Home—Lafayette
Robert A. Hinds, Superintendent
Gregg D. Hartley, Assistant Superintendent
Advisory Committee
E. B. Harter, M.D., Lafayette
Floyd Gingrich, Lafayette
Albert J. Krabbe, Jr., Lafayette
Mrs. Robert Davidson, Delphi
Mrs. Robert Williams, Evansville
William Goodman, Gary

Silvercrest Children's Development Center—New Albany
Don A. Miller, Director
David Leslie, Assistant Director
Advisory Committee
Harold T. Boswell, Greencastle
Norton N. Brown, New Albany
Tali Conine, H.S.D., Indianapolis
Maurice McDaniel, New Albany
Mrs. Charles H. Tinsley, Indianapolis
Kenneth H. Brown, M.D., New Albany

Indiana Soldiers' and Sailors' Children's Home—Knightstown
S. W. Brewer, Superintendent
Max E. Stanley, Principal
Paul Holland, Assistant Superintendent
Advisory Committee
William H. Smith, D.D.S., Edinburg
Gerald Carmony, Shelbyville
Mrs. William E. Steckler, Trafalgar
Mrs. Orin Nowlin, Seymour
Frank H. Green, Jr., M.D., Rushville
William D. Jackson, Indianapolis

Bureau of Medical Services

Harry D. Offutt, Jr., M.D., Director
Charles W. Gish, D.D.S., Director, Division of Dental Health
Harry D. Offutt, Jr., M.D., Acting Director, Division of Maternal and Child Health
Joseph E. Palmer, Director, Division of Medical Care Administration
Geraldine Wojtowicz, R.N., Director, Division of Nursing
George F. Heighway, Director, Division of Health Facilities
Charles L. Barrett, M.D., Director, Division of Chronic & Communicable Disease Control
Janet A. Craig, R.N., Director, Division of Hospital and Institutional Services

Bedding Advisory Board

Ted Fields, Indianapolis
Robert D. Steinsberger, Indianapolis
Mrs. George Costa, Indianapolis
Mrs. Jackie Ravenscroft, Wakarusa
Donald R. Wolf, Fort Wayne
Charles L. Tucker, Nappanee
John E. Devereaux, Michigan City

Commission for the Handicapped

James M. Kirtley, M.D., Chairman, Crawfordsville
William Passmore, East Chicago
Hon. Charles E. Bosma, Beech Grove
Kenneth Reber, Ed.D., Indianapolis
Tali Conine, H.S.D., Indianapolis
Spiro B. Mitsos, Ph.D., Evansville
John Norris, Indianapolis
Gilbert A. Bliton, Indianapolis
James Kirby Riley, Indianapolis
James McClelland, Indianapolis
Bryce Treadwell, D.O., Garrett
Gordon B. Dumas, Indianapolis
Glenn N. Brinker, D.D.S., Fort Wayne
William Ellsworth Murray, M.D., Indianapolis
Richard H. Wenzel, Indianapolis
Theodore Shaver, Indianapolis
Merrill C. Beyerl, Ph.D., Muncie
Thomas C. Hasbrook, Indianapolis
Lee G. Freel, Gary
Henry W. Hofstetter, O.D., Bloomington
Mark E. Wagner, Bremen

Commission on Forensic Sciences

Garry L. Bolinger, M.D., Indianapolis
James A. Benz, M.D., Indianapolis
Sgt. Nicholas R. Gulling, Indianapolis
John Pless, M.D., Bedford

Hospital Licensing Council

Hugh K. Thatcher, Jr., M.D., Chairman, Indianapolis
John O. Butler, M.D., Indianapolis, ex officio
Wayne A. Stanton, Indianapolis, ex officio
William D. Gibson, Washington
Peter R. Mariani, Noblesville
Mrs. Patricia Steuver, R.N., Aurora
Sister Mary Brooks, C.S.C., South Bend
Mark Slen, Fort Wayne

State Anatomical Board

Ward W. Moore, M.D., Secretary-Treasurer, Indianapolis
Ralph E. McDonald, D.D.S., Indianapolis
Steven C. Beering, M.D., Indianapolis

Environmental Management Board

Mrs. Carole Rust, Mount Vernon, Chairman
John E. Christian, Ph.D., Lafayette
Hon. Richard C. Collins, Crown Point
Merrill Ferris, Milton, Vice Chairman
John A. Norris, Greenwood
John M. Vaughan, Ph.D., Indianapolis
Joseph D. Cloud, Richmond, ex officio
Fred N. Brenner, Indianapolis, ex officio
William T. Paynter, M.D., Indianapolis, ex officio
H. Earl Capehart, Indianapolis, ex officio
Robert Holt, Muncie, ex officio
Ralph C. Pickard, Indianapolis, Technical Secretary

Mobile Home Advisory Board

Melville Fath, Westville
Ned Beck, Columbus
Eugene S. Rifner, M.D., Marion
Richard Lance, Portland
Wesley Lods, West Lafayette
Chester H. Canham, Indianapolis, ex officio

Health Facilities Council

Mrs. Nancy E. Dayhoff, R.N., Shelbyville
William D. Christen, Indianapolis
Orville Sherman, North Manchester
Rev. W. L. Williams, Indianapolis
Mrs. Marion N. Steffy, ex officio, Indianapolis
William C. Goodwin, ex officio, Angola
Ralph Thornburg, Jr., R.Ph., Syracuse
Thomas Crump, Jr., Gary
Robert Norman, Shelbyville
Philip E. Souder, Warren
Harold Burdette, M.D., Indianapolis
Don R. Downing, O.D., Seymour
Mrs. Cecil M. Harden, Covington
James F. Conover, Terre Haute
Norman Wright, Huntingburg
A. C. Offutt, M.D., Indianapolis

Radiation Control Advisory Commission

J. E. Christian, Ph.D., Lafayette, Vice Chairman
James C. Katterjohn, M.D., Beech Grove
John E. Magnuson, D.D.S., LaPorte
Donald C. Moore, M.D., Columbus
Larry J. Wallace, Indianapolis, ex officio
W. H. Lanam, Indianapolis, ex officio
Ross E. Crabtree, Ph.D., Indianapolis
Hal S. Stocks, Secretary, Indianapolis

Speech Pathology and Audiology, State Board of Examiners on

Richard A. Hoops, Ph.D., Muncie, Chairman
Ms. Clara Fischer, Plainfield
Glenn McDermott, Richmond
Raymond W. Quist, Ph.D., Terre Haute
Nicholas M. Hipskind, Ph.D., Bloomington
Advisors
John H. Payne, Indianapolis
Oscar Green, M.D., Indianapolis

Hemophilia Advisory Committee

Robert L. Baehner, M.D., Indianapolis, Chairman
Conn Healy, M.D., Evansville
Victor H. Muller, M.D., Indianapolis
Mrs. Katie Milburn, Indianapolis, Secretary
Robert M. Seibel, M.D., Nashville
Wei-Ping Loh, M.D., Gary
Robert Ringle, Bremen

Hearing Aid Dealer Advisory Committee

John H. Payne, Indianapolis, Chairman
J. William Wright III, M.D., Indianapolis
John F. Triska, Lafayette
Donald I. Clark, Muncie
Aubrey Epstein, Ph.D., Bloomington
Sanford C. Snyderman, M.D., Fort Wayne
William T. Paynter, M.D., Indianapolis, ex officio, Secretary

Stream Pollution Control Board

Robert Holt, Muncie, Chairman
Joseph D. Cloud, Richmond, ex officio
Hon. Robert D. Orr, Evansville, ex officio
Charles R. Greves, Bloomfield
John M. Heeter, Indianapolis, Vice Chairman
Oral H. Hert, Technical Secretary, Indianapolis

Sickle Cell Anemia Advisory Committee

Edward J. Hicks, Ph.D., Indianapolis, Chairman
Robert L. Baehner, M.D., Indianapolis, Vice-Chairman
Clorius L. Lay, Gary
Morris Green, M.D., Indianapolis
Joe C. Christian, M.D., Indianapolis
Raymond O. Pierce, M.D., Indianapolis
Mrs. Nancy McCoy, Indianapolis
Robert K. McKechnie, M.D., Jeffersonville
William M. Dugan, Jr., M.D., Indianapolis
Alexander S. Williams, M.D., Gary
John T. Young, M.D., Indianapolis

Air Pollution Control Board

Gary L. Watson, Lebanon, Chairman
David H. Markstone, M.D., Indianapolis, Vice-Chairman
H. Earl Capehart, Indianapolis
Leo M. Lototzky, Indianapolis
C. D. Hartman, Portage
Roy N. Hibner, Michigan City
Ralph C. Pickard, Indianapolis, Technical Secretary

Examination of Infants for Inborn Errors of Metabolism, Advisory Committee on

Kenneth Ahler, M.D., Rensselaer
Dennis Dawes, Danville
James R. McKenzie, M.D., Indianapolis
Josephine Van Fleet, M.D., Indianapolis
George E. Branam, M.D., Muncie
Ira Brandt, M.D., Indianapolis
Charles L. Barrett, M.D., Indianapolis, Technical Secretary

MEDICAL LICENSING BOARD OF INDIANA

700 N. High School Rd.
46224: phone: 317-633-4885
Isadore J. Kwitny, M.D., Exec. Director

MEDICAL BOARD

James N. Hampton, M.D., Argos, President
Bruce C. Brink, D.O., Princeton, Vice-President
Isadore J. Kwitny, M.D., Indianapolis, Secretary
Edward L. Hollenberg, M.D., Winamac, Treasurer
John D. Miller, M.D., Zionsville
John H. Mader, M.D., Richmond
Walter J. Beneville, D.C., Jeffersonville

PODIATRY BOARD

Jack B. Glick, D.P.M., Indianapolis, President
Melvin I. Weisman, D.P.M., Decatur, Vice-President
Isadore J. Kwitny, M.D., Indianapolis
James N. Hampton, M.D., Argos
Edward L. Hollenberg, M.D., Winamac

STATE BOARD OF NURSES REGISTRATION AND NURSING EDUCATION

M & W Bldg., 700 N. High School Rd., Indianapolis 46224
Miss Emma Flinner, R.N., Executive Officer, Indianapolis
Mrs. Carol Kent, R.N., Newburgh, President
Miss Shirley A. Ross, R.N., Indianapolis
Mrs. Mary B. Runnels, L.P.N., Indianapolis
Mrs. Marguerite Clark, Indianapolis
Rosemary Hill, Gary
Mrs. Maryanne Roehm, R.N., Ph.D., Terre Haute
Miss Mary Helen Zink, R.N., Secretary, West Lafayette

INDIANA STATE BOARD OF ANIMAL HEALTH

700 N. High School Rd., Suite 200, Indianapolis 46224
David Van Meter Jr., D.V.M., Chairman, Odon
George W. Pickering, Vice Chairman, Lewisville
Joe Judge, Westfield
Vere Cochran, Portland
Dale L. Cook, Elkhart
Dale A. Hendrickson, D.V.M., Parker City
Farrell R. Robinson, D.V.M., Purdue University, West Lafayette (ex officio)
Paul Thurston, Alexandria
Dane Walker, Lebanon
Lowell W. Hinchman, D.V.M., Indiana State Veterinarian & Secretary (ex officio), Glenwood

VETERINARY MEDICAL EXAMINING BOARD

700 N. High School Rd., Suite 200, Indianapolis 46224
Gordon W. Lawler, D.V.M., Anderson, Chairman
Ralph G. Welp, D.V.M., Princeton, Vice Chairman
Paul L. Dieterlen, D.V.M., Treasurer, Nappanee
Larry K. Sunbury, Seymour
John R. Swengel, Indianapolis
Lowell W. Hinchman, D.V.M., Indiana State Veterinarian and Secretary (ex officio), Glenwood

STATE BOARD OF BARBER EXAMINERS

Room 706 State Office Building, 100 N. Senate, Indianapolis 46204
Frank H. Squire, President, Valparaiso
Alfred Cerulli, Executive Secretary, Indianapolis

STATE BOARD OF BEAUTY CULTURIST EXAMINERS

Room 1023, 100 N. Senate, Indianapolis 46204
Patsy Nix, President, Boonville
Dorothy Cotterell, Vice President, Covington
Lucille Messick, Secretary, Terre Haute

STATE BOARD OF DENTAL EXAMINERS

700 N. High School Rd., Indianapolis 46224
Paul A. Stephens, D.D.S., President, Gary
Richard T. Newton, D.D.S., Vice President, Columbus
Frank S. Duncan, Jr., D.D.S., Secretary, Auburn
Raymond L. Dennany, D.D.S., Brazil
John W. Sandlewick, D.D.S., Indianapolis
Everett L. Ringenberg, D.D.S., Richmond
M. Gilbert Eberhart, D.D.S., Mishawaka
Edward L. Fritz, D.D.S., Evansville
Richard C. Harris, D.D.S., Washington

COMMISSION ON AGING AND AGED

Room 201, 215 N. Senate Ave., Indianapolis 46202
Maurice E. Endwright, Executive Director
Warren Andrew, Indianapolis
Harold Stark, Highland
Sidney Levin, Terre Haute
Eva Goble, Lafayette
Chas. Sappenfield, Muncie
F. Benjamin Davis, Indianapolis
Rita Fields, Valparaiso
Jesse Dickinson, South Bend
Charles Plummer, North Vernon
Mrs. Kermit Burrous, Peru
Mrs. Edna Troth Walker, Orleans
Scott Doup, Columbus
R. Wyatt Mick, Jr., Mishawaka
Marvin Isley, Franklin
Bernice Bradley, Fort Wayne
Lawrence Foote, Rome City

INDIANA DEPARTMENT OF VETERANS' AFFAIRS

Room 707, 100 N. Senate, Indianapolis 46204
John F. Knop, Director, Indianapolis

INDIANA BOARD OF PHARMACY

M & W Bldg., 700 N. High School Road, Indianapolis 46224
William E. Shirley, President, Bedford
Barbara A. Nelson, Vice-President, West Lafayette
J. Douglas Reeves, Knightstown
Chester C. Coan, Greencastle
James W. Butt, Brownstown
M. Joseph Schwartz, Executive Director, Indianapolis
Vernis Purcell, Inspector, Indianapolis
Wendolin Opel, Inspector, Paoli
Raymond Horner, Inspector, Indianapolis
George Landers, Inspector, Carmel
Sandra E. Rech, Inspector, Indianapolis

BOARD OF REGISTRATION AND EXAMINATION IN OPTOMETRY

700 North High School Road, Indianapolis 46224, 317-633-4847
Philip M. George, O.D., President, Franklin
Lowell B. Zerbe, O.D., Vice President, Columbus
R. Lewis Scott, O.D., Secretary, Hartford City
Richard E. Stuller, O.D., South Bend
Ralph W. Zehner, O.D., Evansville
Barbara J. Sargent, Executive Director, Indianapolis
Jean F. Carpenter, Secretary, Indianapolis

INDUSTRIAL BOARD

Room 601, 100 N. Senate Indianapolis 46204
Robert W. McNevin, Chairman, Indianapolis
Sue C. Roderick, Secretary, Indianapolis
Richard J. Noel, Member, Indianapolis
Richard J. Cronin, Member, Terre Haute
John J. McDonagh, Member, Hammond
G. Terrence Coriden, Columbus
Everett N. Lucas, Frankfort
John A. Rader, Member, Williamsport

INDIANA REHABILITATION SERVICES BOARD

1001 Illinois Bldg., Indianapolis 46204
Dr. Kenneth W. Reber, State Director
Frederick A. Silver, Director, Division of Services for the Blind
Jim Hancock, Director, Disability Determination Division
Lanier Vines, Director, Vocational Rehabilitation Division

DEPARTMENT OF PUBLIC WELFARE

Room 701, 100 N. Senate, Indianapolis 46204
Wayne A. Stanton, Indianapolis, Administrator
Mrs. Marion N. Steffey, Associate Administrator/Director, Division of Public Assistance, Indianapolis
James H. Cook, Assistant Adm.-Administration, Indianapolis
Robert F. Smith, Assistant Administrator, Medicaid, Indianapolis
Joseph M. Daly, M.D., Director, Division of Services for Crippled Children, Indianapolis
Daniel R. Sacks, Personnel Director, Indianapolis
Mrs. Norma Goldberg, Director, Division Child Welfare-Social Services, Indianapolis
William E. Harding, Director, Division of Administrative Services, Indianapolis
Dean Dobbins, Director, Child Support Division, Indianapolis
Allen E. Green, Director, Food Stamp Division, Indianapolis.

STATE BOARD OF PUBLIC WELFARE

Robert G. Watson, Jr., President, Vincennes
James W. Burnett, Jr., Vice President, Indianapolis
Mrs. Arvella M. Stanton, Gary
Mrs. Joseph P. (Marion M.) Hilger, Columbus
Joseph R. Seffrin, Ph.D., West Lafayette

Department of Mental Health

Five Indiana Square, Indianapolis 46204
William E. Murray, M.D., Commissioner, Indianapolis
Richard C. McNabb, M.D., Deputy Commissioner, Indpls.

DIVISION ON ADDICTION SERVICES
John Jones, Assistant Commissioner

DIVISION ON MENTAL RETARDATION AND OTHER DEVELOPMENTAL DISABILITIES
John B. Cockshott, PhD., Assistant Commissioner

DIVISION OF MENTAL ILLNESS
Richard N. French, M.D., Assistant Commissioner

DIVISION OF PLANNING AND EVALUATION
Martin W. Meyer, Ed.D., Assistant Commissioner

DIVISION OF ADMINISTRATIVE SERVICES
George R. Schieve, Deputy Commissioner, Administration

DIVISION OF CHILD MENTAL HEALTH
Richard C. McNabb, M.D., Acting Director

DIVISION OF PROFESSIONAL SERVICES
John U. Keating, M.D., Assistant Commissioner

Mental Health Board

Dwight Schuster, M.D., Indianapolis
Richard Artes, Ph.D., Muncie
Reuben Hill, Indianapolis
Paul Pitz, Indianapolis
E. Blair Warner, South Bend
W. Calvert Brand, Columbus
Judge Morton Kanz, East Chicago
Tali Conine, H.S.D., Indianapolis
Dr. Roy Patton, Indianapolis
Mrs. Helen Lundquist, Elkhart
Thomas Binford, Indianapolis
Walter Helmke, Fort Wayne

MENTAL INSTITUTIONS

****Indicates Approved Medicare Hospital**

Central State Hospital—Indianapolis
J. Eric Helmer, Superintendent
E. Keith Miller, Assistant Superintendent, Administration

****Evansville State Hospital—Evansville**
Spiro T. Mitsos, Ph.D., Superintendent
Francis J. Flanagan, Assistant Superintendent, Administration

****Logansport State Hospital—Logansport**
James F. Frohbieter, Superintendent
Ralph Carey, Assistant Superintendent, Administration

****Madison State Hospital—Madison**
Ott B. McAtee, M.D., Superintendent
Jerry A. Thaden, Ass't Superintendent, Administration

Norman M. Beatty Memorial Hospital—Westville
Robert Heyne, Acting Superintendent

****LaRue D. Carter Memorial Hospital—Indianapolis**
Donald F. Moore, M.D., Medical Director
Randall E. Devine, Ass't Superintendent, Administration

****Richmond State Hospital—Richmond**
Eugene R. Darby, Superintendent
Gary Lowmaster, Assistant Superintendent, Administration

****Fort Wayne State Hospital and Training Center—Fort Wayne**
Ora R. Ackerman, Ed.D., Superintendent
Robert Gibson, Assistant Superintendent, Administration

Muscatatuck State Hospital and Training Center—Butlerville
Hal K. Green, Ed.D., Superintendent

****New Castle State Hospital—New Castle**
Bernard Wagner, Ph.D., Superintendent
George H. Rauch, Business Administrator

Northern Indiana State Hospital and Developmental Disabilities—South Bend
John L. Neher, M.D., Acting Superintendent

Evansville Psychiatric Children's Center—Evansville
George T. Jones, Superintendent

Professional Medical and Allied Organizations

Due to the additional content of the Yearbook, cut-off date for changes in the following groups was in April. Some have changed in the interim. However, it is felt that where officers have changed, a query to those listed here will put interested persons in contact with such groups.

OFFICERS OF THE AMERICAN MEDICAL ASSOCIATION 1978-1979

535 North Dearborn Street, Chicago, Illinois 60610

GENERAL OFFICERS

Tom E. Nesbitt, *President* Nashville, Tenn
Hoyt D. Gardner, *President-Elect* Louisville
John H. Budd, *Immediate Past President* Cleveland
Daniel T. Cloud, *Secretary-Treasurer* Phoenix, Ariz
William Y. Rial, *Speaker, House of Delegates* Swarthmore, Pa
Harrison L. Rogers, Jr, *Vice-Speaker, House of Delegates* Atlanta

BOARD OF TRUSTEES

John J. Coury, Jr, Port Huron, Mich 1979
Frank J. Jirka, Jr, Barrington Hills, Ill 1979
Hubert A. Ritter, St Louis 1979
Lowell H. Steen, Hammond, Ind 1979
H. Thomas Ballantine, Jr, Boston 1980
Daniel T. Cloud, Phoenix, Ariz 1980
George H. Mills, Honolulu 1980
George A. Rowland, Millville, Pa 1980
Joseph F. Boyle, Los Angeles 1981
Charles Max Cole, Dallas 1981
William S. Hotchkiss, Norfolk, Va 1981
Tom E. Nesbitt *President*
Hoyt D. Gardner *President-Elect*
John H. Budd *Immediate Past President*
Robert B. Hunter, Sedro Woolley, Wash, 1981, *Chairman*

COUNCILS OF THE AMA

Council on Constitution and Bylaws
Carroll L. Witten, *Chairman*, Louisville, 1979
William B. Smith, *Secretary*, Chicago

Council on Continuing Physician Education
John E. Albers, *Chairman*, Cincinnati
James L. Breeling, *Secretary*, Chicago

Judicial Council
Burns A. Dobbins, Jr., *Chairman*, Ft. Lauderdale, Fla., 1982
Bruce Nortell, *Secretary*, Chicago

Council on Legislation
William C. Felch, *Chairman*, Rye, NY
Harry N. Peterson, *Secretary*, Chicago

Council on Long-Range Planning and Development
Rufus K. Broadaway, *Chairman*, Miami, 1980
Bruce Balfe, *Secretary*, Chicago

Council on Medical Education
Joseph M. White, *Chairman*, Columbia, Mo., 1979
Richard L. Egan, *Secretary*, Chicago

Council on Medical Service
Robert T. Kelly, *Chairman*, Grand Rapids, Minn., 1981
Nicholas M. Griffin, *Secretary*, Chicago

Council on Scientific Affairs
C. John Tupper, *Chairman*, Davis, Ca., 1981
Richard J. Jones, *Secretary*, Chicago

AMERICAN COLLEGE OF SURGEONS, INDIANA CHAPTER

President—Richard C. McPherson, M.D., 2600 Greenbush St., Lafayette 47902

President-Elect—John L. Glover, M.D., 1001 W. Tenth St., Indianapolis 46202

Secretary-Treasurer—James A. Madura, M.D., 1100 W. Michigan St., Indianapolis 46223

INDIANA ACADEMY OF FAMILY PHYSICIANS

President—William D. Ritchie, M.D., 567 Olmstead, Evansville 47711

Treasurer—Richard Huber, M.D., 219 Sycamore, Bedford 47421

Immediate Past President—Paul A. Williams, M.D., 1103 E. Grace, Rensselaer 47978

Executive Director—Mrs. Jackie Schilling, 4847 S. High School Road, Indianapolis 46241 **Phone: 856-3757**

INDIANA ACADEMY OF OPHTHALMOLOGY

President—Camilla Parker, M.D., 2500 E. Broadway, Logansport 46947

Secretary—Daniel Evans, M.D., 2005 Valparaiso St., Valparaiso 46383

INDIANA ROENTGEN SOCIETY, INC. CHAPTER OF THE AMERICAN COLLEGE OF RADIOLOGY

President—Edmund A. Franken, M.D., I.U.M.C., 1100 W. Michigan St., Indianapolis 46202

President-Elect—John A. Knote, M.D., Home Hospital, Dept. of Radiology, Lafayette 47904

Secretary—Wallace S. Tirman, M.D., 15640 Windingbrook Dr., Mishawaka 46544

Executive Secretary—Mrs. Rose M. Vance, 2015 Western Ave., Suite 317, South Bend 46629

INDIANA SOCIETY OF INTERNAL MEDICINE

President—Fred Adler, M.D., 800 MacArthur Blvd., Munster 46321

Immediate Past President—Charles W. Magnuson, M.D., 1148 Ridgedale Road, South Bend 46614

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY

President—Walter Owens, M.D., 421 W. First St., Bloomington 47401

President-Elect and **Vice-President**—Hugh A. Stallings, M.D., 3700 Bellemeade Avenue, Evansville

Secretary-Treasurer—Paul R. Jarrett, Jr., M.D., 8330 Nabb Rd., Indianapolis 46260

INDIANA SOCIETY OF ANESTHESIOLOGISTS

President—Robert K. Stoelting, M.D., Department of Anesthesiology, 1100 West Michigan St., Indianapolis 46202

President-Elect—Wendell L. Edwards, M.D., 8836 Kirkham Road, Indianapolis 46260

Secretary-Treasurer—Dean L. Strycker, M.D., 2495 Redfield St., Niles, Mich. 49120

INDIANA PSYCHIATRIC SOCIETY

President—Richard Rahdert, M.D., 2166 Tecumseh Park Lane, West Lafayette 47906

President-Elect—Sherman Franz, M.D., 2510 Sandcrest, Columbus 47201

Treasurer—John E. Kooiker, M.D., Indiana University Hospital, N-604, 1100 W. Michigan Street, Indianapolis 46202

INDIANA ASSOCIATION OF PATHOLOGISTS, INC.

President—David E. Smith, M.D., 1604 N. Capitol Avenue, Indianapolis 46202

President-Elect—John E. Pless, M.D., Box 1149, Bloomington 47401

Secretary-Treasurer—Emmett C. Pierce, M.D., Box 708, Greenfield 46140

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS

Chairman—Robert Hannemann, M.D., 2600 Greenbush St., Lafayette 47904

Vice Chairman—Robert Sweeney, M.D., 211 North Eddy at Colfax, South Bend 46617

Secretary—Stephen E. Bash, M.D., 2828 Fairfield Ave., Fort Wayne 46807

Treasurer—Michael A. Hogan, M.D., 2704 E. 62nd St., #C, Indianapolis 46220

INDIANA THORACIC SOCIETY

30 E. Georgia, Room 401, Indianapolis 46204

President—Byron C. Wheeler, M.D., 400-8th Avenue, Terre Haute 47804

President-Elect—Stephen J. Jay, M.D., Pulmonary Disease Section, Regenstrief Health Center, 6th Flr., 1001 W. 10th St., Indianapolis 46202

Vice-President—Ramon Dunkin, M.D., Winona Memorial Hospital, 3232 N. Meridian St., Indianapolis 46208

Secretary-Treasurer—Robert E. Gould, M.D., 1229 S. Main St., New Castle 47362

Executive Director—Larry E. Zentz

AMERICAN COLLEGE OF PHYSICIANS INDIANA REGION

Governor—George T. Lukemeyer, M.D., 8395 N. Illinois St., Indianapolis 46260

Treasurer—A. Ebner Blatt, M.D., 3266 N. Meridian St., Suite 306, Indianapolis 46208

BONE AND JOINT CLUB

President—Jos. B. Davis, M.D., 131 N. Washington St., Marion 46952

Vice-President—Ray Pierce, M.D., Department of Orthopedics, Wishard Memorial Hospital, 1001 W. Tenth St., Indianapolis 46202

INDIANA STATE UROLOGICAL SOCIETY

Chairman—David P. Schlueter, M.D., 2828 Fairfield Avenue, Fort Wayne 46807

Secretary-Treasurer—Phillip G. Mosbaugh, M.D., 2010 W. 86th Street, Suite 103, Indianapolis 46260

INTERNATIONAL COLLEGE OF SURGEONS, INDIANA SECTION

President—George M. Ellis, M.D., 108 E. Tenth St., Connersville 47331

Secretary-Treasurer—Glen McClure, M.D., 777 Wolfenberger, Sullivan 47882

Regent—Lowell J. Hillis, M.D., 2410 Hastye Hill, Logansport 46947

INDIANA ORTHOPAEDIC SOCIETY

President—Frank B. Throop, M.D., 3266 N. Meridian St., Indianapolis 46208

Vice-President—Gilbert Gutwein, M.D., 2525 South St., Lafayette 47904

Secretary-Treasurer—George F. Rapp, M.D., 8402 Harcourt Rd., Indianapolis 46260

INDIANA CHAPTER, ASSOCIATION OF AMERICAN PHYSICIANS AND SURGEONS

President—Fletcher McDowell, M.D., 926 W. Main, Muncie 47305

Vice-President—George Ellis, M.D., 108 East Tenth St., Connersville 47331

Secretary-Treasurer—Helen B. Barnes, M.D., 360 S. Madison, Greenwood 46142

INDIANA PHILIPPINE MEDICAL ASSOCIATION

President—V. G. Sison, M.D., 2929 S. First, Terre Haute 47802
President-Elect—C. Archangel, M.D., 207 Sparks Ave., Jeffersonville 47130
Secretary—L. Ramos, M.D., Clarksville 47130
Auditor—T. Garcia, M.D., 1500 Albany St., Beech Grove 46107

INDIANA HEALTH CARE ASSOCIATION

428 Illinois Bldg., Indianapolis 46204

President—Richard C. Schriever, 707 Jackson Park Dr., Seymour 47274

Recording Secretary—Marjorie Pearsey, 612 E. 11th St., Rushville 46173

Treasurer—Raymond W. Heinen, 3700 Washington Avenue, Evansville 47715

Executive Director—Roy P. Whitton

AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS, INC., INDIANA SOCIETY

President—Barbara Perkins, 1901 North Spencer, Indianapolis 46218

President-Elect—Eulah Dearing, EMT, 417 First Street, Huntingburg 47542

Recording Secretary—Diane Bolin, CMA-A, R.R. #5, Box 460, Columbus 47201

Treasurer—Bettye Yard, 2114 Vogel Road, Evansville 47711

Corresponding Secretary—Janet Cutler, RN, R.R. 1, Box 287M, Pittsboro 46167

INDIANA OCCUPATIONAL THERAPY ASSOCIATION

President—Sheryl Henninger, OTR, Lafayette Home Hospital, Lafayette 47905

Treasurer—Theresa McNulty, COTA, I.U. Medical Center, Indianapolis 46202

Secretary—Patricia Samuels, OTR, Community Hospital, 1500 Ritter Ave., Indianapolis 46219

INDIANA ACADEMY OF PHYSICIAN'S ASSISTANTS

President—Kedrick A. Meyers, P.A.-C., P.O. Box 70, Shelbyville 46176
Secretary—George O. Browne, III, P.A.

INDIANA PHARMACEUTICAL ASSOCIATION, INC.

54 Monument Circle, Indianapolis 46204

President—Melvin Lichtenfeld, R.Ph., Crown Point

Treasurer—Joseph E. McSoley, R.Ph., Indianapolis

Executive Director—David A. Clark, R.Ph.

INDIANA CITIZENS' LEAGUE FOR NURSING

827 Yorkshire Rd., Anderson 46012

President—Marjorie R. Miller, R.N., Professor of Nursing, Vincennes University, Vincennes 47591

President-Elect—Virginia Blakely, R.N., Director, Anderson School of Practical Nursing, 325 W. 38th St., Anderson 46014

Secretary—Marguerite F. Clark, R.N., Retired Director of Indianapolis School of Practical Nursing, 8755 Haverstick Rd., Indianapolis 46240

Treasurer—Becky Logan, Secretary to Associate Dean of Occupational Education, Vincennes University, Vincennes 47591

Executive Coordinator—Janet Swank, L.P.N., Staff Nurse, Americana Healthcare Center, 827 Yorkshire Rd., Anderson 46012

INDIANA STATE NURSES' ASSOCIATION

3231 N. Meridian St., Suite 53, Indianapolis 46208

President—Brenda L. Lyon, R.N., Nineveh

Secretary—Mary Nicoson, R.N., Evansville

Treasurer—Magdalene Fuller, R.N., Indianapolis

Executive Director—Lucretia Ann Saunders

INDIANA FEDERATION LICENSED PRACTICAL NURSES, INC.

President—Mary Pierson, 230 Chandler, Evansville 47713

Secretary—Thelma Sipes, 6865 W. State Rd. 45, Bloomington 47404

Treasurer—Jean Hicks, R. 2, Box 102, Trafalger 46181

Executive Secretary—Mrs. Mary Runnels, 6101 N. College, Indianapolis 46220

INDIANA HOSPITAL ASSOCIATION

President—Elton TeKolste, 3921 N. Meridian St., Indianapolis 46208

Chairman—Sister M. Martin, Adm., St. Joseph's Hospital, 1907 W. Sycamore Street, Kokomo 46901

Chairman-Elect—Leigh E. Morris, Pres., LaPorte Hospital, Inc., P.O. Box 670, LaPorte 46350

Secretary-Treasurer—Allen M. Hicks, Pres., Community Hospital, 1500 N. Ritter Avenue, Indianapolis 46219

INDIANA DENTAL ASSOCIATION

402 Jefferson Bldg., 1 Virginia Ave., Indianapolis 46204

President—Lloyd J. Phillips, D.D.S., 842 Consolidated Building, Indianapolis 46204

Executive Director—Gale E. Coons

INDIANA STATE PODIATRY ASSOCIATION

514 Illinois Bldg., Indianapolis 46204

President—John B. Toepp, D.P.M.

Vice-President—Gerald J. Henke, D.P.M.

Secretary-Treasurer—Richard E. Sluzewski, Jr., D.P.M.

Voluntary Health Agencies

INDIANA DIVISION, INC.
AMERICAN CANCER SOCIETY

2700 E. 55th Place, Indianapolis 46220—317-257-5326

President—William F. Nowlin, M.D., R.R. 7, Box 64-A, Valparaiso 46383

Secretary—Mrs. Mary Lou Poe, 109 N. State St., Greenfield 46140

Treasurer—Glenn Gramelspacher, 1433 Park St., Jasper 46546

Executive Director—James O. Davis

AMERICAN HEART ASSOCIATION,
INDIANA AFFILIATE, INC.

222 S. Downey Ave., Suite 222, Indianapolis 46219—317-357-8622

President—Milton E. Gibson, M.D.

Chairman of the Board—Vera K. Deppert, R.N.

Treasurer—John J. Griffin

Secretary—Mrs. Andrew Russell

Executive Director—Dale M. Byerly

INDIANA EASTER SEAL SOCIETY FOR
CRIPPLED CHILDREN AND ADULTS, INC.

3816 E. 96th Street, Indianapolis 46240—317-844-7919

President—Charles Baer, 513 Aldridge, Kokomo 46902

President-Elect—Mrs. Pat Johnson, 145 Forest Drive, Jeffersonville 47130

Treasurer—Calvin Hiatt, Jr., R.R. #1, Cicero 46034

Secretary—Mrs. Marie Whitecotton, 2419 Valley Avenue, Marion 46952

Executive Director—James A. Carter

MENTAL HEALTH ASSOCIATION IN INDIANA, INC.

1433 North Meridian St., Indianapolis 46202—317-638-3501

President—Vernon B. Smith, Monroe County

Secretary—Mrs. Ervin Buse, Greene County

Treasurer—Thad Hanway, White County

Executive Director—Joseph R. Brown

HEMOPHILIA OF INDIANA, INC.

38 N. Pennsylvania St., Room 309, Indianapolis, Indiana 46204—317-639-1184

President—Jo Anne Beck, Indianapolis

Secretary—Mrs. Susan K. Siverling, Pendleton

Treasurer—Mark S. Danner, Indianapolis

Executive Director—Mrs. Katie Milburn

INDIANA CHAPTER, THE ARTHRITIS FOUNDATION

1010 E. 86th St., Indianapolis 46240—317-844-3341
Toll Free: 800-382-4536

President—Merle B. Rose III

Secretary—Ms. Meryl Delehanty

Treasurer—Harold S. Aron, DPM

Executive Director—Franklin Hirsch

KIDNEY FOUNDATION OF INDIANA

1010 E. 86th St., Indianapolis 46240—317-844-6309

President—James T. Waite

Secretary—Doris Dorbecker

Treasurer—Howard Shearon

Executive Director—D. Michael Hinshaw

AMERICAN LUNG ASSOCIATION OF INDIANA

30 E. Georgia, Room 401, Indianapolis 46204—317-632-3383

President—LeRoy Mitchell, 3210 Watling St., East Chicago 46312

President-Elect—Ralph C. Wilmore, M.D., V. A. Hospital, 1481 W. 10th St., Indianapolis 46202

Secretary—Mrs. Rosemary Denney, R.N., R. 8, Box 388, Greenfield 46140

Treasurer—John C. Jenkins, Eli Lilly & Co., Box 618, Indianapolis 46206

Executive Director—Larry E. Zentz

INDIANA SOCIETY FOR THE PREVENTION OF BLINDNESS

1425 E. 86th St., Indianapolis 46240—317-259-8163

President—Wilbert Washington, M.D., 2140 N. Capitol, Indianapolis 46202

Treasurer—Blake E. Devitt, One Indiana Square, Indianapolis 46204

Secretary—Mrs. John W. Maxwell, 1502 East 80th St., Indianapolis 46240

Executive Director—Sue (Mrs. James R.) Hetherington

THE NATIONAL FOUNDATION, MARCH OF DIMES

Regional Director—Mr. Dale Boehm, 112½ East Main Street, St. Charles, Illinois 60174—312-377-2227

Indiana Central Field Representative—Norbert L. Talbott, 3728 N. Shadeland, Indianapolis 46226—317-547-5293

Indiana South Field Representative—Stuart Schlageter, 212 W. 2nd Street, New Albany 47150—812-945-0227

Indiana North Field Representative—Thomas Burzynski, 1507 Portage Ave., South Bend 46616—219-289-9271

AMERICAN DIABETES ASSOCIATION INDIANA AFFILIATE, INC.

222 S. Downey Ave., Suite 320, Indianapolis 46219—317-634-1719

President—Charles M. Clark, Jr., M.D.

President-Elect—John H. Warvel, Jr., M.D.

Chairman of the Board—James C. Costin

Secretary—Pebby Allyn, R.N.

Treasurer—Robert L. Romine, C.P.A.

Executive Director—Sandra L. Byerly

CYSTIC FIBROSIS FOUNDATION

6050 E. 10th St., Indianapolis 46219—317-352-0901

President—Mrs. James Dutton

Secretary—Edwin Leith

Treasurer—Kenneth Chandler

Executive Director—Thomas Bricker

INDIANA COMMITTEE TO COMBAT HUNTINGTON'S DISEASE, INC.

President—Maurice Auxier, Madison

Secretary—Mrs. Wanda Wyne, Madison State Hospital, Madison 47250—812-265-7408

Treasurer—Mrs. Irene Whitlatch, Hanover

INDIANA ASSOCIATION FOR RETARDED CITIZENS

One Virginia Avenue, Suite 333, Indianapolis 46204—317-632-4387

President—Roger Quinlan, 501 Prospect, Elkhart 46514

Secretary—Roger J. Warrun, 5331 Liz Lane, Anderson 46011

Treasurer—Thomas E. Turner, 8375 Compton Drive, Indianapolis 46240

Executive Director—Frank E. Ball

MUSCULAR DYSTROPHY ASSOCIATION

6201 LaPas Trail, Suite 100, Indianapolis 46268—317-298-9640

President—Evelyn Payne

Secretary—Sandy Stiles

Treasurer—Mrs. Pat Radel

Executive Director—Mrs. Jennie Ramspacher

VISITING NURSE HOME CARE ASSOCIATION

615 North Alabama Street, Room 306, Indianapolis 46204—317-635-8501

President—Jack Killen

Recording Secretary—Mrs. Richard B. Schnute

Corresponding Secretary—William C. Griffith, Jr.

Treasurer—Allen Hicks

Executive Director—John S. Wodniak

UNITED CEREBRAL PALSY OF INDIANA

445 N. Pennsylvania St., Indianapolis 46204—317-634-7134

President—Norman J. Georgia, Ph.D.

Secretary—Ronnie Sams

Treasurer—Julian Coleman, Jr.

Executive Director—W. Michael Gallagher

EPILEPSY FOUNDATION OF INDIANA, INC.

445 N. Pennsylvania St., Suite 305, Indianapolis 46204—317-634-4630

President—Robert L. W. Clark

Secretary—Mrs. Jess C. Andrew, Jr.

Treasurer—William Blaser, CPA

(Acting) Executive Director—John L. Murphy

Chairman, Professional Advisory Board—Omkar Markand, M.D.

Community Mental Health Services In the State of Indiana: 1979

Following is a list of outpatient mental health facilities and comprehensive community mental health centers in the state of Indiana, alphabetized by city of location. The reader who might be interested in additional services (partial hospitalization, halfway houses, inpatient care, consultation and education, emergency services, court-screening services, aftercare, alcohol and drug services, geriatric services, and services to children and adolescents) should consult Daniel D. Steiner, Director of Community Mental Health Services, Department of Mental Health, Five Indiana Square, Indianapolis 46204; 317-633-7558.

Anderson

*The Center for Mental Health, Inc., P.O. Box 1258, 46015, 429 Citizens Bank Bldg.—317-642-4968
Thomas A. Fedor, M.D., Medical Director
Richard DeHaven, Administrator

Bloomington

Indiana University Psychological Clinic, Psychology Building, 47401—812-337-2311
Leon Levy, Ph.D., Director

*South Central Community Mental Health Center, 640 S. Rogers St., 47401—812-339-1691
Herman Brown, Ph.D., Executive Director
William Gilkey, Ph.D., Director of Clinical Services

Columbus

*Quinco Consulting Center, 2075 Lincoln Park Drive, 47201—812-379-2341
John Carver, Ph.D., Executive Director

Danville

*Cummins Mental Health Clinic, Inc., 258 Meadow Drive, 46122—317-745-5419
Gary D. Beck, ACSW, Director

East Chicago

*Tri-City Comprehensive Community Mental Health Center, Inc., 3901 Indianapolis Blvd., East Chicago 46312—219-398-7050
Glenn Kuipers, ACSW, Center Director
George Batacan, M.D., Medical Director

Elkhart

*Oaklawn Community Mental Health Center, Inc., 2600 Oakland Ave., 46514—219-294-3551
Otto D. Klassen, M.D., Medical Director
Hal C. Loewen, Administrator

Evansville

*Southwestern Indiana Mental Health Center, Inc., 415 Mulberry St., 47713—812-423-7791
Eugene Mittelman, M.D., Ph.D., Executive Director
Robert M. Spear, Associate Executive Director

Fort Wayne

*Mental Health Center at Fort Wayne, Inc., 909 E. State Blvd., Fort Wayne 46805—219-482-9111
Robert L. Greenlee, M.D., Executive Director
Richard W. Noel, ACSW, Administrator

Gary

Gary Community Mental Health Center, Gary National Bank Bldg., 504 Broadway, 46402—219-885-4264
David Hennage, Ph.D., Executive Director
W. Thomas Love, M.D., Medical Director

Indianapolis

*Long Adult Psychiatry Clinic, Indiana-Purdue University Medical Center, 1100 W. Michigan St., 46202—317-264-7422
Jack Adair, M.D., Medical Director
John I. Nurnberger, M.D., Administrator

**Central State Hospital Clinic—Alcoholism—3000 W. Washington St., 46222—317-639-5304
Rosendo G. Transinsin, M.D., Unit Chief
Mrs. Deanne K. Peer, Administrator

*Child Guidance Clinic of Marion County, Inc., 1949 E. 11th St., 46201—317-632-5381
Antonio Recinto, M.D., Medical Director
Ben L. Glancy, ACSW, Administrator

Epilepsy Clinic of The Indiana University Medical Center, Fifth Floor, Riley Hospital, 46202—317-264-4974
Omkar Markand, M.D., Medical Director

Episcopal Community Services, Inc., 1537 Central Ave., 46202—317-635-2538
Mrs. Anna Hipple, Board President

Gallahue Mental Health Center, 1500 N. Ritter Ave., 46219—317-353-5931
James Davis, M.D., Medical Director
Seward A. Horner, Administrator

**Larue D. Carter Memorial Hospital—Outpatient Clinic, 1315 W. 10th St., 46202—317-634-8401
Joseph A. FitzGerald, M.D., Director and Administrator

*Midtown Community Mental Health Center, 1001 W. 10th St., 46202—317-630-7606
James J. Wright, M.D., Medical Director
Dennis Jones, ACSW, MBA, Associate Program Director

*Partially supported by the Indiana Department of Mental Health.
**Completely supported by the Indiana Department of Mental Health.

*Riley Child Guidance Clinic, Indiana University Medical Center, 1100 W. Michigan St., 46202—317-264-8162
Donald Churchill, M.D., Medical Director and Administrator

Jasper

*Southern Hills Mental Health Center, Inc., P.O. Box 245, 939 Memorial Drive, 47546—812-482-3020
Robert Flick, MBA, Executive Director
Joseph del Giudice, M.D., Medical Director

Jeffersonville

*Southern Indiana Mental Health and Guidance Center, Inc., 207 W. 13th St., 47130—812-283-4491
Joseph B. Brill, M.D., Director
John Case, Administrator

Kendallville

*Northeastern Comprehensive Community Mental Health Center, 305 E. North St., 46755—219-347-4400
William P. Shantz, M.D., Medical Director
Dale Cochard, Executive Director

Kokomo

Regional Mental Health Center, 3500 S. Lafountain St., 46901—317-453-8555
Gilbert Anderson, Ed.D., Executive Director
Robert H. Adams, M.D., Medical Director

Lafayette

Purdue Psychological Services Center, Education Building, Purdue University, West Lafayette 47907—317-749-2754
James D. Linden, Ph.D., Director
Theodore Wachs, Ph.D., Child Clinic Services

*Wabash Valley Hospital Mental Health Center, Inc., 2900 N. River Road, West Lafayette 47906—317-463-2555
Richard F. Rahdert, M.D., Medical Director
Donald R. Kinzer, Administrator

LaPorte

*LaPorte County Comprehensive Mental Health Center, 901 Washington St. 46360—219-879-4621
James Hunt, Executive Director

Lawrenceburg

*Community Mental Health Center, Inc., 285 Bielby Rd., Lawrenceburg 47025—812-537-1302
Ronald Myers, M.D., Medical Director
James Jones, Executive Director

Logansport

*Guidance Center/Four County Comprehensive Mental Health Center, 125 Ninth Street—219-722-3984
James J. Bibby, Administrator
Scott Carson, Clinical Director

Madison

**Madison State Hospital Outpatient Clinic, Madison 47250—812-265-2611
Donald B. Rogers, M.D., Medical Director
Ott B. McAtee, M.D., Superintendent

Marion

*Grant-Blackford County Mental Health Center, 505 Wabash Ave., 46952—317-662-3971
John Stewart, M.D., Medical Director
John A. Creek, Executive Director

Merrillville

Southlake Community Mental Health Center, 514 E. 86th Ave., 46410—219-769-4005
Lee Strawhun, Executive Director
James L. Beverly, Deputy Director

Muncie

Comprehensive Mental Health Services of East Central Indiana, Inc., 1525 N. Walnut St., 47303—317-288-8843
Russell D. McKnight, M.D., Medical Director
Suzanne Gresham, Ph.D., Executive Director

Noblesville

Tri-County Mental Health Foundation, Inc., P.O. Box 363, 1249 E. Connor St., 46060—317-773-6864
Fred Koss, ACSW, Director

Richmond

*Dunn Mental Health Center, Inc., 401 East Main Street, 47374—317-935-3211
H. Glen Redmyer, Acting Director

South Bend

*The Mental Health Center of St. Joseph County, Inc., 403-405 Madison St., 46617—219-234-0061
C. Glenn Harris, M.D., Medical Director
Joseph Stephens, Executive Director

Terre Haute

*Katherine Hamilton Mental Health Center, 620 Eighth Ave. 47804—812-232-1181
William C. Shriner, M.D., Medical Director
Thomas Barone, Director of Administration

Valparaiso

*Porter-Starke Services, 701 Wall St., 46383—219-464-8541
Lee Grogg, Director
Borivoj Divcic, M.D., Medical Director

Vincennes

*Vincennes Comprehensive Mental Health Center, Good Samaritan Hospital, 520 S. Seventh St., 47591—812-885-3291
Frederick H. Buehl, M.D., Medical Director
Larry L. Burch, ACSW, Associate Director of Administration

Warsaw

*Otis R. Bowen Center for Human Services, Inc., 850 N. Harrison St., 46580—219-267-7169
H. Matheu, M.D., Director of Clinical Services

Medically Oriented Rehabilitation Centers in Indiana

CLARK COUNTY

Southeastern Indiana Rehabilitation Center, Inc.
1329 Applegate Lane
Clarksville 47130

ELKHART COUNTY

Association For The Disabled of Elkhart County, Inc.
P.O. Box 398
Bristol 46507

LAKE COUNTY

Trade Winds Rehabilitation Center Inc.
5901 West 7th
Gary 46406

Rehabilitation Center
The Methodist Hospital of Gary, Inc.
600 Grant Street
Gary 46402

MARION COUNTY

Crossroads Rehabilitation Center
3242 Sutherland Avenue
Indianapolis 46205

Hook Rehabilitation Center
Community Hospital
1500 N. Ritter Ave.
Indianapolis 46219

VANDERBURGH COUNTY

The Rehabilitation Center, Inc.
3701 Bellemeade Avenue
Evansville 47715

Licensed Hospitals in Indiana*

January 1, 1979

ADAMS COUNTY

Adams County Memorial Hospital
805 High St., Decatur 46733
Andrew J. Barrett II, Executive Director

ALLEN COUNTY

The Lutheran Hospital of Fort Wayne, Inc.
3024 Fairfield Ave., Fort Wayne 46807
Robert H. Reedy, President
Parkview Memorial Hospital, Inc.
2200 Randalia Dr., Fort Wayne 46805
Mark Slen, Executive Director
St. Joseph's Hospital of Fort Wayne, Inc.
700 Broadway, Fort Wayne 46802
Sister M. Kathleen Quinn, Adm.

BARTHOLOMEW COUNTY

Bartholomew County Hospital
2400 E. 17th St., Columbus 47201
Robert S. Borczon, Executive Director

BLACKFORD COUNTY

Blackford County Hospital
503 E. Van Cleve St., Hartford City 47348
David J. McIntire, Adm.

BOONE COUNTY

Witham Memorial Hospital
1124 N. Lebanon St., Lebanon 46052
John B. Riekena, Adm.
****Koala Center (Psychiatric)**
1711 Lafayette Ave.
P.O. Box 627, Lebanon 46052
Hal Thompson, Adm.

CASS COUNTY

Memorial Hospital
1101 Michigan Ave., Logansport 46947
Herbert L. Fromm, Executive Director

CLARK COUNTY

Clark County Memorial Hospital
1220 Missouri Ave., Jeffersonville 47130
Benedict Hesen, Adm.
North Clark Community Hospital
State Road 3, P.O. Box 214, Charlestown 47111
Robert E. Hardison, Jr., Exec. Dir.

CLAY COUNTY

Clay County Hospital
1206 E. National Ave., Brazil 47834
Richard Denney, Adm.

CLINTON COUNTY

Clinton County Hospital
1300 S. Jackson St., Frankfort 46041
William J. Russell, Adm.

*Licensed by the Indiana Hospital Licensing Council and the Indiana State Board of Health.
**Supervised by State Department of Mental Health

DAVIESS COUNTY

Daviess County Hospital
1314 Grand Ave., Washington 47501
William D. Gibson, Adm.

DEARBORN COUNTY

Dearborn County Hospital
600 Wilson Creek Rd., Lawrenceburg 47025
P. Donald Muhlenthaler, Exec. Dir.

DECATUR COUNTY

Decatur County Memorial Hospital
720 N. Lincoln St., Greensburg 47240
Phillip D. Marlott, Executive Director

DEKALB COUNTY

DeKalb Memorial Hospital, Inc.
East Seventh St., Auburn 46706
L. C. Baker, Adm.

DELAWARE COUNTY

Ball Memorial Hospital
2401 University Ave., Muncie 47303
Roy F. Erickson, Pres.

DUBOIS COUNTY

Little Company of Mary of Indiana, Inc.
D/B/A Memorial Hospital
800 West 9th St., Jasper 47546
Herman A. Kohlman, Executive Director
St. Joseph's Hospital
Leland Heights, Huntingburg 47542
Norman Wright, Adm.

ELKHART COUNTY

Elkhart General Hospital
600 East Boulevard, Elkhart 46514
Dale S. Strassheim, Pres.
Goshen General Hospital
200 High Park Avenue, Goshen 46526
Warren O. Phemister, Adm.

FAYETTE COUNTY

Fayette Memorial Hospital Association, Inc.
1941 Virginia Ave., Connersville 47331
Jack A. Peters, Exec. Dir.

FLOYD COUNTY

Memorial Hospital of Floyd County
1850 State St., New Albany 47150
William I. Fender, Adm.

FULTON COUNTY

Woodlawn Hospital
1400 E. State Rd. 14, Rochester 46975
Robert E. Kelsey, Jr., Exec. Dir.

GIBSON COUNTY

Gibson General Hospital
1808 Sherman Drive, Princeton 47670
Howard F. Vire, Adm.
Wirth Osteopathic Hospital, Inc.
Highway 64, West, Oakland City 47660
Albert Ban, Jr., Adm.

GRANT COUNTY

Marion General Hospital
Wabash at Euclid, Marion 46952
John W. Green, Adm.

GREENE COUNTY

Greene County General Hospital
R.R. 1, Linton 47441
Malcolm M. Clippinger, Adm.

HAMILTON COUNTY

Riverview Hospital
395 Westfield Rd., Noblesville 46060
Peter R. Mariani, Adm.

HANCOCK COUNTY

Hancock County Memorial Hospital
801 North State Street, Greenfield 46140
John B. White, Adm.

HARRISON COUNTY

Harrison County Hospital
R.R. 6, Box 75, Corydon 47112
Timothy C. Lawson, Exec. Dir.

HENDRICKS COUNTY

Hendricks County Hospital
1000 E. Main St., Danville 46122
Dennis W. Dawes, Adm.

HENRY COUNTY

Henry County Memorial Hospital
1000 N. 16th, P.O. Box 490, New Castle 47362
Jack J. Basler, Adm.

HOWARD COUNTY

Howard Community Hospital
3500 S. Lafountain St., Kokomo 46901
George R. Banjak, Adm.
St. Joseph Memorial Hospital of Kokomo, Ind., Inc.
1907 W. Sycamore St., Kokomo 46901
Sister M. Martin C.S.J., Adm.

HUNTINGTON COUNTY

Huntington Memorial Hospital
1215 Etna Ave., Huntington 46750
Daniel M. Couch, President

JACKSON COUNTY

Jackson County Schneck Memorial Hospital
200 S. Walnut St., Seymour 47274
George H. James, Jr., Adm.

JASPER COUNTY

Jasper County Hospital
1104 East Grace St., Rensselaer 47978
Jack M. Corey, Exec. Dir.

JAY COUNTY

Jay County Hospital
505 W. Arch St., Portland 47371
Robert F. Cummins, Adm.

JEFFERSON COUNTY

The King's Daughters' Hospital
112 Presbyterian Ave., Madison 47250
Darrel J. Scott, Adm.

JENNINGS COUNTY

Jennings Community Hospital
301 Henry St., North Vernon 47265
Lou Vaught, Adm.

JOHNSON COUNTY

Indiana Masonic Home Hospital
690 South State St., Franklin 46131
Mrs. Evelyn M. Stanley, Adm.

Johnson County Memorial Hospital
Hwy. 44, West
P.O. Box 368, Franklin 46131
Norbert G. Smith, Adm.

KNOX COUNTY

Good Samaritan Hospital
520 S. Seventh St., Vincennes 47591
Charles Arends, Exec. Dir.

KOSCIUSKO COUNTY

Kosciusko Community Hospital, Inc.
2101 East Dubois Drive, Warsaw 46580
L. Milton Holmgrain, Adm.

LAGRANGE COUNTY

LaGrange County Hospital
Townline Road, LaGrange 46761
Mrs. Elsie R. Willard, Exec. Dir.

LAKE COUNTY

Broadway Methodist Hospital
8701 Broadway, Merrillville 46410
R. B. Glesne, Adm.

Our Lady of Mercy Hospital
U. S. Highway 30, Dyer 46311
Judith K. Call, Adm.

The Community Hospital
901 MacArthur Blvd., Munster 46321
Edward P. Robinson, Adm.

St. Anthony Medical Center
Main and Franciscan Rd., Crown Point 46307
Lawrence T. Filosa, Pres.

St. Catherine Hospital of East Chicago
4321 Fir St., East Chicago 46312
Sister M. Stephen Brueggeman, Adm.

The Methodist Hospital of Gary, Inc.
600 Grant Street, Gary 46402
R. B. Glesne, Adm.

St. Mary Medical Center, Inc.
540 Tyler St., Gary 46402
Paul R. Kaiser, Adm.

St. Margaret Hospital
25 Douglas St., Hammond 46320
Sister M. Doris Hodges, O.S.F., Adm.

St. Mary Medical Center, Inc.
1500 S. Lake Park Ave., Hobart 46342
Paul R. Kaiser, Adm.

The Community Hospital
901 MacArthur Blvd., Munster 46321
Edward P. Robinson, Adm.

LAPORTE COUNTY

LaPorte Hospital
State and Madison Avenues, LaPorte 46350
Leigh E. Morris, Adm.

Memorial Hospital of Michigan City
5th and Pine Sts., Michigan City 46360
Norman D. Steider, Adm.

St. Anthony Hospital
301 W. Homer St., Michigan City 46360
Sister Mary Agnes Zinselmeyer, Adm.

Walters Hospital Foundation, Inc.
3714 S. Franklin St., Michigan City 46360

LAWRENCE COUNTY

Bedford Medical Center
2900 W. 16th Street, Bedford 47421
Donald W. Dodds, Adm.

Dunn Memorial Hospital
1600 23rd St., Bedford 47421
Richard W. Hahn, Adm.

MADISON COUNTY

Community Hospital of Anderson and Madison County
1515 N. Madison Ave., Anderson 46012
Ms. Linda J. Miller, Adm.

Mercy Hospital, Inc.
1331 South "A" St., Elwood 46036
Edward J. Tapek, Adm.

St. John's Hickey Memorial Hospital
2015 Jackson, Anderson 46014
Sister M. Michaeleen Frieders, C.S.C., Adm.

MARION COUNTY

Community Hospital of Indianapolis, Inc.
1500 N. Ritter Ave., Indianapolis 46219
Allen M. Hicks, Pres.

****Cornelia Cole Fairbanks Hospital (Alcohol Addiction Only)**
1575 Northwestern Ave.
Indianapolis 46204
Robert Wagener, Adm.

Indiana University Hospitals
1100 W. Michigan St., Indianapolis 46202
Roger S. Hunt, Dir.

Methodist Hospital of Indiana, Inc.
1604 N. Capitol Ave., Indianapolis 46202
Jack A. L. Hahn, President

St. Francis Hospital Center
1600 Albany St., Beech Grove 46107
Sister Mary Henrita Laake, Exec. Dir.
Don D. Hamachek, Adm.

St. Vincent Hospital and Health Care Center, Inc.
2001 W. 86th St., Indianapolis 46260
Sister Theresa Peck, Adm.

University Heights Hospital, Inc.
3350 Carson Ave., Indianapolis 46227
Raymond E. Laughlin, Adm.

Westview Osteopathic Medical Hospital
3630 Guion Rd., Indianapolis 46222
James F. Knopp, Pres. and Adm.

Winona Memorial Hospital
3232 N. Meridian St., Indianapolis 46208
Ryland P. Davis, Exec. Vice-Pres.

William N. Wishard Memorial Hospital
1001 W. 10th St., Indianapolis 46202
William I. Jenkins, Adm.

MARSHALL COUNTY

Community Hospital of German Township, Inc.
411 S. Whitlock St., Bremen 46506
Roy M. Foltin, Adm.

Marshall County Parkview Hospital
1401 N. Michigan St., Plymouth 46563
Martin P. Braaksma, Exec. Dir.

MIAMI COUNTY

Dukes Memorial Hospital
Grant and Boulevard, Peru 46970
Robert L. Allman, Exec. Dir.

MONROE COUNTY

Bloomington Hospital
605-625 W. Second St., Bloomington 47401
Roland E. Kohr, Adm.

MONTGOMERY COUNTY

Montgomery County Culver Union Hospital
306 Binford St., Crawsfordsville 47933
Gary L. Rowe, Adm.

MORGAN COUNTY

The Margaret Kendrick Memorial Hospital, Inc.
1201 Hadley Road, Mooresville 46158
Mrs. Louise D. Swisher, Adm.

Morgan County Memorial Hospital
2209 John R. Wooden Dr., Martinsville 46151
Kenneth G. Stella, Adm.

NEWTON COUNTY

George Ade Memorial Hospital of Newton County
Highway 16, Brook 47922
Paul C. Poparad, Adm.

NOBLE COUNTY

McCray Memorial Hospital, Inc.
Hospital Drive, Kendallville 46755
Dennis Wolford, Adm.

ORANGE COUNTY

Orange County Hospital
Sandy Hook Road, Paoli 47454
W. Lavelle Garritson, Exec. Dir.

PERRY COUNTY

Perry County Memorial Hospital
P.O. Box H. Star Route, Tell City 47586
James A. Mroch, Adm.

PORTER COUNTY

Porter Memorial Hospital
814 LaPorte Ave., Valparaiso 46383
Arthur S. Malasto, Adm.

PULASKI COUNTY

Pulaski Memorial Hospital
616 East 13th St., Winamac 46996
Theodore H. Kittell, Exec. Dir.

PUTNAM COUNTY

Putnam County Hospital
1542 S. Bloomington St., Greencastle 46135
John D. Fajt, Exec. Dir.

RANDOLPH COUNTY

Randolph County Hospital
Oak St. and Greenville Ave., Winchester 47394
Bryan R. Zeh, Adm.

Union City Memorial Hospital
900 N. Columbia St., Union City 47390
Michael S. Shaffer, Adm.

RIPLEY COUNTY

Margaret Mary Community Hospital
Mitchell Road, Batesville 47006
Wilbur L. Mauzy, Adm.

RUSH COUNTY

Rush Memorial Hospital
1300 N. Main St., Rushville 46173
Karl F. Stein, Adm.

ST. JOSEPH COUNTY

Healthwin Hospital
20531 Darden Road, South Bend 46637
Donald F. Henry, Adm.

Memorial Hospital of South Bend
615 N. Michigan St., South Bend 46601
Richard W. Trenkner, Adm.

St. Joseph Hospital of Mishawaka, Indiana, Inc.
215 W. 4th St., Mishawaka 46544
Sister M. Maureen Freihage, Adm.

St. Joseph's Hospital
811 E. Madison St., South Bend 46634
David C. Trew, Adm.

South Bend Osteopathic Hospital
2515 E. Jefferson Blvd., South Bend 46615
A. F. Kull, D.O., President
Stanley J. Fleece, Adm.

SCOTT COUNTY

Scott County Memorial Hospital
R.R. 1, Box 19, Scottsburg 47170
Arthur B. Allaben, Adm.

SHELBY COUNTY

William S. Major Hospital
150 W. Washington St., Shelbyville 46176
Frank H. Learned, Adm.

STARKE COUNTY

Starke Memorial Hospital
102 E. Culver Road, Knox 46534
Jack L. Nichols, Exec. Dir.

STEUBEN COUNTY

Cameron Memorial Community Hospital, Inc.
416 East Maumee St., Angola 46703
Eugene H. Rexilius, Adm.

SULLIVAN COUNTY

Mary Sherman Hospital
320 N. Section St., Sullivan 47882
William H. Sluder, Adm.

TIPPECANOE COUNTY

Lafayette Home Hospital, Inc.
2400 South St., Lafayette 47902
Franklin E. Simek, Adm.

Purdue University Student Hospital
Purdue University
West Lafayette 47907
Loyal W. Combs, M.D., Dir.

St. Elizabeth Hospital Medical Center
1501 Hartford Street, Lafayette 47904
Paul E. Hess, Adm.

TIPTON COUNTY

Tipton County Memorial Hospital
1000 South Main Street, Tipton 46072
James C. Talley, Adm.

VANDERBURGH COUNTY

Deaconess Hospital, Inc.
600 Mary St., Evansville 47747
David A. Johnson, Adm.

St. Mary's Medical Center of Evansville, Inc.
3700 Washington Ave., Evansville 47750
Sister Gertrude Bastnagel, Adm.

Welborn Memorial Baptist Hospital, Inc.
401 S.E. 6th St., Evansville 47713
Donald I. Gent, Executive Dir.

VERMILLION COUNTY

Vermillion County Hospital
825 S. Main St., Clinton 47842
Gerald C. Dooley, Adm.

VIGO COUNTY

Terre Haute Regional Hospital
1021 S. 6th St., Terre Haute 47808
Allyn R. Harris, Adm.

Union Hospital, Inc.
1606 N. 7th St., Terre Haute 47804
Frank Shelton, Adm.

WABASH COUNTY

Wabash County Hospital
670 N. East St., Wabash 46992
C. W. Hendrix, Exec. Dir.

WARREN COUNTY

Community Hospital Assn., Inc.
412 N. Monroe St., Williamsport 47993
Mrs. Norma Hillyer, R.N., Adm.

WARRICK COUNTY

Warrick Hospital, Inc.
1116 Millis Ave., Boonville 47601
William Emig, Adm.

WASHINGTON COUNTY

Washington County Memorial Hospital
911 N. Shelby Street, Salem 47167
Rodney M. Coats, Adm.

WAYNE COUNTY

Reid Memorial Hospital
1401 Chester Blvd., Richmond 47374
Kenneth R. Spoon, Exec. Dir.

WELLS COUNTY

Caylor-Nickel Hospital, Inc.
309 S. Main St., Bluffton 46714
William F. Brockmann, Adm.

Wells Community Hospital
1100 S. Main St., Bluffton 46714
Paul Bender, Exec. Dir.

WHITE COUNTY

White County Memorial Hospital
1101 O'Connor Blvd., Monticello 47960
William R. Saunders, Adm.

WHITLEY COUNTY

Whitley County Memorial Hospital
353 N. Oak St., Columbia City 46725
Robert L. McConnell, Adm.

Federally Approved Home Health Services Agencies in Indiana

ALLEN COUNTY

Indiana Homemakers Inc.
2250 Lake Ave., Fort Wayne 46805

Visiting Nurses Service of Fort Wayne, Inc.
227 E. Washington Blvd., Fort Wayne 46802

Personnel Pool of Fort Wayne, Inc.
203 East Berry St., Fort Wayne 46802

Parkview Hospice
2200 Randalia Dr., Fort Wayne, 46805

BARTHOLOMEW COUNTY

Bartholomew County Health Department Home Health Service
2400 East 17th St., Columbus 47201

CASS COUNTY

Home Care Program of Memorial Hospital
1101 Michigan Ave., Logansport 46947

CLARK COUNTY

Clark County Health Department
North Clark Memorial Hospital, 3rd Floor, 1220 Missouri Ave., Jeffersonville 47130

DAVIESS COUNTY

Quad County Visiting Nurse Association, Inc.
508 Highland, Washington 47501

DEARBORN COUNTY

Rural Health Activities Home Health Agency
605 Wilson Creek Rd., Lawrenceburg 47025

DELAWARE COUNTY

Visiting Nurse Association, Inc.
2500 Bethel Avenue, Muncie 47304

Indiana Homemakers Inc.
Rose Court Bldg., Suite 203, Muncie 47305

DUBOIS COUNTY

Dubois County Home Health Agency
Courthouse, Jasper 47546

ELKHART COUNTY

Nursing Division, Elkhart County Health Unit
2400 E. Elkhart Rd., Goshen 46526

GRANT COUNTY

Grant County Visiting Nurse Association, Inc.
Wabash @ Euclid, Marion 46952

HANCOCK COUNTY

East Side Home Care
R.R. #7, Box 70, Greenfield 47140

HUNTINGTON COUNTY

Huntington County Home Health Agency, Huntington Memorial Hospital
1215 Etna Avenue, Huntington 46750

JACKSON COUNTY

Home Health Care Division, Jackson County Department of Health, Jackson County Hospital
Poplar & Bruce Streets, Seymour 47274

Ambulatory Outpatient Surgical Centers

ALLEN COUNTY

Fairfield Surgical Center—2828 Fairfield Avenue, Fort Wayne 46807
Administrator: Wayne S. Miller, M.D.

Fort Wayne Surgical Center, Inc., 1333 Maycrest Drive, Fort Wayne 46805
Administrator: Charles T. Frissell, D.D.S.

MARION COUNTY

Indianapolis Women's Center, 5626 East 16th St., Indianapolis 46218
Director: Ralph T. Streeter, M.D.

JEFFERSON COUNTY

Home Health Division, Jefferson County Health Dept.
315 E. Second St., Madison 47250

JOHNSON COUNTY

Division of Nursing, Johnson County Health Dept.
2 E. Jefferson, Franklin 46131

KOSCIUSKO COUNTY

Home Health Care Service of Kosciusko County
204 W. Ft. Wayne, Warsaw 46580

LAKE COUNTY

Home Care Department, Lake County Health Dept.
2293 N. Main, Crown Point 46307

Home Nursing Service
United Health Program,
Calumet Area, Inc.
111 Sibley St., Hammond 46320

Medical Personnel Pool of Lake & Porter Counties, Inc.
5401 Broadway, Suite G, Merrillville 46410

Northwest Indiana Home Health Services
Visiting Nurse Association, Inc.
6513 Kennedy Avenue, Hammond 46323

Northern Indiana Home Health Services, Inc.
3660 Grant Street, Gary 46408

LAPORTE COUNTY

Visiting Nurses Association of LaPorte County, Inc.
903 Indiana Ave., LaPorte 46350

LAWRENCE COUNTY

In-Home Services
P.O. Box 205, Mitchell 47446

MADISON COUNTY

Elwood V.N.A., Inc.
P.O. Box 7 (218 S. 16th St.), Elwood 46036

V.N.A. of Anderson, Inc.
1207 Main, Anderson 46016

MARION COUNTY

Indiana Homemakers, Inc.
6352 N. Guilford, Indianapolis 46220

Visiting Nurse Home Care Assoc. of Greater Indianapolis, Inc.
615 N. Alabama St., Indianapolis 46204

Medical Personnel Pool of Indpls., Inc.
300 E. Fall Creek Pkwy.—North Drive, Indianapolis 46205

MONROE COUNTY

Public Health Nursing Assn. of Bloomington & Monroe County, Inc.
315 W. Dodds St., Bloomington 47401

PORTER COUNTY

Visiting Nurse Association of Porter County, Inc.
755 W. Lincolnway, Valparaiso 46383

RUSH COUNTY

Rush County Home Health Services
Rush County Health Dept.
Courthouse, Room 5, Rushville 46175

ST. JOSEPH COUNTY

Indiana Homemakers, Inc.
120 W. LaSalle, Rm. 1104, South Bend 46601

Visiting Nurses Assn. of St. Joseph County, Inc.
711 E. Colfax, South Bend 46617

Kelly Health Care Inc.
105 E. Jefferson Blvd., Suite 824, South Bend 46601

Medical Personnel Pool of South Bend, Inc.
103 W. Wayne St., Suite 401, South Bend 46601

SCOTT COUNTY

Home Care Division, Scott County Health Department
R.R. 2, Scottsburg 47170

TIPPECANOE COUNTY

Visiting Nursing Service of Lafayette, Inc.
1000 S. St., Harvey Bldg., Lafayette 47901

Indiana Homemakers Inc.
2400 Ferry St., Lafayette 47904

VANDERBURGH COUNTY

Visiting Nurse Association of Southwestern Indiana, Inc.
120 S.E. First St., Evansville 47713

VIGO COUNTY

Visiting Nurse Assn. of Terre Haute, Inc.
328 S. Fifth St., Terre Haute 47807

Wabash Valley Home Health Care
P.O. Box 576 (800 Poplar St.), Terre Haute 47808

WAYNE COUNTY

Wayne County Health Department
Courthouse, Richmond 47374

Independent Laboratories Participating in the Medicare/Medicaid Program in Indiana as of January 1, 1979

ALLEN COUNTY

Duemling Clinic Laboratory
2828 Fairfield Ave.
Fort Wayne 46807

University Park Medical Clinic
5110 N. Clinton St.
Fort Wayne 46805

Lake Avenue Medical Laboratory
3217 Lake Ave.
Fort Wayne 46805

Ft. Wayne Medical Laboratory Corp.
519 Medical Center Building
347 W. Berry St., P.O. Box 268
Fort Wayne 46802

New Haven Medical Laboratory
1010 Werling Road
New Haven 46774

BARTHOLOMEW COUNTY

Columbus Medical Laboratory
Doctors Park—Building #2
Columbus 47201

DELAWARE COUNTY

Pathologists Associated
407 W. Main St.
Muncie 47305

FLOYD COUNTY

Professional Arts Laboratory
Professional Arts Bldg., Suite 20
1919 State St.
New Albany 47105

GREENE COUNTY

Haag Medical Laboratory
120 E. Vincennes St.
Linton 47441

JOHNSON COUNTY

Greenwood Medical Laboratory
622 N. Madison Ave.
Greenwood 46142

KNOX COUNTY

Vincennes Doctors' Laboratory
704 Vigo St.
Vincennes 47591

LAKE COUNTY

Crown Point Clinical Laboratory
113 N. Court St.
Crown Point 46307

DeGraff Pathology Laboratory
8237 Forest Avenue
Munster 46321

Hammond Clinic Laboratory
7905 Calumet Avenue
Munster 46321

Lake Ridge Medical Laboratory, Inc.
1573 N. Cline Ave.
Griffith 46319

South Lake Hematology Laboratory
8127 Merrillville Road
Merrillville 46410

Gary Medical Center Clinical Laboratories
3290 Grant St.
Gary 46409

Rural Health Clinics in Indiana

CRAWFORD COUNTY

Crawford Medical Clinic
North Main St.
English 47118

ORANGE COUNTY

Comprehensive Health Care
Rt. #3, Hospital Rd.
Paoli 47454

RUSH COUNTY

Carthage Medical Clinic
Box 85
Carthage 46115

Diagnostic Laboratory, Inc.
3275 Broadway
Gary 46409

LAPORTE COUNTY

Northern Indiana Medical Laboratory Services, Inc.
1701 Buffalo St., P.O. Box 341
Michigan City 46360

MADISON COUNTY

Anderson Medical Laboratories, Inc.
333 Jackson St.
Anderson 46012

MARION COUNTY

AccuSTAT Medical Laboratories, Inc.
3508 Rockville Rd., Rm. 116 B
Indianapolis 46222

Indianapolis Medical Laboratory, Inc.
8501 Zionsville Rd.
Indianapolis 46268

Irvington Medical Laboratory
6051 E. Washington St.
Indianapolis 46219

Madison Village Laboratory
7210 Madison Ave.
Indianapolis 46227

The Medical Laboratory of Drs. Thornton, Haymond, Costin, Buehl, Bolinger, & Warner
301 E. 38th St.
Indianapolis 46205

Pathlabs, Inc.
5420 N. College Ave.
Indianapolis 46220

Professional Associates, Inc. d/b/a Memorial Clinic of Indianapolis
3266 N. Meridian St.
Indianapolis 46208

MARSHALL COUNTY

deGraffenried & Sternberg Medical Consultation Service
225 W. Jefferson St.
Plymouth 46563

ST. JOSEPH COUNTY

Medical Arts Laboratory
303 S. Main St.
Mishawaka 46544

South Bend Medical Foundation, Inc.
531 N. Main St.
South Bend 46601

Jefferson Medical Arts Laboratory
919 East Jefferson Blvd.
South Bend 46624

TIPPECANOE COUNTY

Physicians Clinical Laboratory, Inc.
2500 Ferry St.
Lafayette 47904

VANDERBURGH COUNTY

BioClinical Laboratories
2353 Division St.
Evansville 47714

Porro Clinical Laboratory
3700 Bellemeade Ave., Suite 118
Evansville 47715

Mid-America Pathology Service
3700 Bellemeade Ave.
P.O. Box 138
Evansville 47715

Pathology Laboratory Service
611 Harriett St., Suite 102
Evansville 47710

Community Agencies for the Mentally Retarded and Other Developmentally Disabled*

ADAMS-WELLS COUNTY

Adams-Wells Association for Retarded Citizens, Inc.
P.O. Box 457, Bluffton 46714

ALLEN COUNTY

Allen County Association for the Retarded, Inc.
2542 Thompson Ave., Fort Wayne 46807

Anthony Wayne Rehabilitation Center for Handicapped and Blind, Inc.
2826 S. Calhoun St., Fort Wayne 46807

BARTHOLOMEW COUNTY

Developmental Services, Inc.
P.O. Box 1023, 422 Washington, Columbus 47201

CASS COUNTY

Cass County Council for The Mentally Retarded, Inc.
1416 Woodlawn Ave., Logansport 46947

CLARK COUNTY

Council for Retarded Children of Clark County, Indiana, Inc.
P.O. Box 486, Jeffersonville 47130

Southeastern Indiana Rehabilitation Center
P.O. Box 2117, 1329 Applegate Lane, Clarksville 47130

DAVIESS-MARTIN COUNTY

Daviess-Martin County Association for Handicapped Citizens, Inc.
1412 Memorial Ave., Washington 47501

DeKALB COUNTY

DeKalb County Parent Group for Handicapped Children
Box 166, Auburn 46706

DELAWARE COUNTY

Delaware County Association for Retarded Citizens, Inc.
114 E. Streeter Ave., Muncie 47303

ELKHART COUNTY

Association for the Disabled of Elkhart County, Inc.
P.O. Box 398, Bristol 46507

FAYETTE-UNION COUNTIES

Fayette-Union Association for Retarded, Inc.
420 West 24th St., Connersville 47331

FLOYD COUNTY

Floyd County Council for the Retarded, Inc.
840 Park Place, New Albany 47150

FULTON COUNTY

Fulton County Association for Retarded Citizens, Inc.
East 18th St., Rochester 46975

GIBSON COUNTY

Gibson County Association for Retarded Citizens, Inc.
Prince and Pinkney, Box 505, Princeton 47670

GRANT-BLACKFORD COUNTY

Grant-Blackford Mental Retardation, Inc.
2715 S. Western Ave., Marion 46952

HAMILTON COUNTY

Janus Developmental Services, Inc.
836 Cherry St., Noblesville 46060

HARRISON COUNTY

Harrison County Association for Retarded Citizens, Inc.
P.O. Box 206, Palmyra 47164

HENRY COUNTY

Henry County Association for Retarded Citizens, Inc.
1343 South 14th St., New Castle 47362

Early Family Intervention Program
New Castle State Hosp., 100 Van Nuys St., New Castle 47362

HOWARD COUNTY

Howard County Association for Retarded Citizens, Inc.
1220 East Laguna St., P.O. Box 2496, Kokomo 46901

HUNTINGTON COUNTY

Huntington County Association for Retarded Citizens, Inc.
1152 E. State St., P.O. Box 1001, Huntington 46750

JAY-RANDOLPH COUNTY

Jay-Randolph Developmental Services, Inc.
E. Water St., Portland 47371

JEFFERSON-SWITZERLAND COUNTY

Jefferson-Switzerland Counties Assn. for Retarded Citizens
Sandstone Diversified Services
P.O. Box 874, Madison 47250

JOHNSON COUNTY

Johnson County Association for Retarded Citizens, Inc.
214 S. State St., Franklin 46131

KNOX COUNTY

Knox County Association for Retarded Citizens, Inc.
P.O. Box 334, 525 North Fourth St., Vincennes 47591

KOSCIUSKO COUNTY

Council for the Retarded of Kosciusko County, Inc.
504 N. Bay Dr., Warsaw 46580

LAGRANGE COUNTY

LaGrange County Association for Retarded Citizens, Inc.
Box 192, LaGrange 46766

*Compiled by the Indiana Department on Mental Retardation, and Other Developmental Disabilities, 5 Indiana Square, Indianapolis 46204.

LAKE COUNTY

Lake County Association for the Retarded, Inc.
2650 W. 35th Ave., Gary 46408
Trade Winds Rehabilitation Centers, Inc.
5901 West 7th Ave., Gary 46406

LAPORTE COUNTY

LaPorte County Sheltered Workshop, Inc.
4315 E. Michigan Blvd., Michigan City 46360
Parents' Council for Handicapped and Retarded Children of LaPorte County, Inc.
3200 S. Cleveland Ave., Michigan City 46360

MADISON COUNTY

Madison County Association for Retarded Citizens, Inc.
P.O. Box 31, Anderson 46015

MARION COUNTY

Marion County Association for Retarded Citizens, Inc.
2400 N. Tibbs Ave., Indianapolis 46222
Goodwill Industries of Central Indiana, Inc.
1635 W. Michigan St., Indianapolis 46222
Crossroads Rehabilitation Center
3242 Sutherland Ave., Indianapolis 46205
Associated Patient Services
1433 N. Meridian St., Indianapolis 46202

MARSHALL-STARKE COUNTIES

Marshall-Starke Development Center, Inc.
1901 Pidco Drive, Plymouth 46563

MONROE COUNTY

Stonebelt Council for Retarded Children, Inc.
2815 E. 10th, Bloomington 47401

MONTGOMERY COUNTY

Disabilities Services, Inc.
600 S. Mill St., Crawfordsville 47933

MORGAN COUNTY

Morgan County Rehabilitation Services, Inc.
190 W. Mitchell Ave., Martinsville 46151

NOBLE COUNTY

Noble County Association for Retarded Citizens, Inc.
205 East Highland Street, Albion 46701

ORANGE COUNTY

Orange County Association for Retarded Citizens, Inc.
P.O. Box 143, Paoli 47454

PARKE COUNTY

Child-Adult Resource Services, Inc.
P.O. Box 96, Rockville 47872

PIKE COUNTY

Pike County Association for Retarded Citizens
c/o Knox County Association for Retarded Citizens, P.O. Box 334, Vincennes 47591

PORTER COUNTY

Porter County Association for Retarded Citizens, Inc.
750 Ransom Rd., Valparaiso 46383

PULASKI COUNTY

Pulaski Association for Retarded Children, Inc.
R.R. 2, Winamac 46996

PUTNAM COUNTY

Putnam County Learning Center, Inc.
Box 504, Greencastle 46135

RIPLEY COUNTY

New Horizons Rehabilitation, Inc.
P.O. Box 98, Batesville 47006

ST. JOSEPH COUNTY

Council for the Retarded of St. Joseph County, Inc.
1235 N. Eddy St., P.O. Box 1049, South Bend 46624

SHELBY COUNTY

Shares, Inc.
157 E. Broadway, Shelbyville 46176

STEUBEN COUNTY

Community Sheltered Workshop of Steuben Co., Inc.
502 Weatherhead St., Angola 46703

SULLIVAN COUNTY

Sullivan County Association for Retarded Children, Inc.
424 East Hartley Street, Sullivan 47882

TIPPECANOE COUNTY

Wabash Center, Inc.
2000 Greenbush St., Lafayette 47904

VANDERBURGH COUNTY

Evansville Association for Retarded Citizens, Inc.
615 W. Virginia St., Evansville 47710
The Rehabilitation Center, Inc.
3701 Bellemeade Ave., Evansville 47715
Tri-State Epilepsy Association, Inc.
421 North Main St., Evansville 47711

VIGO COUNTY

Katherine Hamilton Mental Health Center, Inc.
101 S. 12th St., Terre Haute 47804

WABASH COUNTY

Wabash County Council for Mentally Retarded and Vocationally Handicapped, Inc.
421 West Canal St., Wabash 46992

WARRICK COUNTY

Southern Indiana Rehabilitation Services, Inc.
Route 3, Folsomville Rd., Boonville 47601

WAYNE COUNTY

Wayne County Council for Retarded Citizens, Inc.
800 Mendleson Dr., Richmond 47374

WHITE COUNTY

Comprehensive Developmental Centers, Inc.
900 West Norway Road, Monticello 47960

WHITLEY COUNTY

Whitley County Association for the Retarded, Inc.
445 South Line, Columbia City 46725

Indiana Licensed Health Facilities

January 1979

This is a directory of health facilities licensed by the State of Indiana, State Board of Health.

Information concerning services offered, charges and admission policies of the facilities should be obtained through direct contact with the facility. Information concerning licensing of health facilities and copies of the directory (which includes data as to capacity and telephone number) are available from the Indiana State Board of Health, Division of Health Facilities, 1330 W. Michigan St., Indianapolis 46206.

Identification Code

(R) — Residential Care Facility

(C) — Comprehensive Nursing Care Facility

(R&C) — Residential Care and Comprehensive Nursing Care Facility

(R&BHA) — Residential Care and Boarding Home for the Aged Facility

(BHA) — Boarding Home for the Aged Facility

(BHA&C) — Boarding Home for the Aged and Comprehensive Nursing Care Facility

Adm. — Person in direct charge of facility

ADAMS COUNTY

Berne Nursing Home (R&C)
906 W. Main St., Berne 46711
Pauline Hostetler, L.P.N., Adm.

Decatur Community Care Center (C)
1145 Mercer Ave., Decatur 46733
Jane C. Aspy, Adm.

Swiss Village, Inc. (R&C)
P.O. Box 363, Berne 46711
Wayne Smith, Adm.

ALLEN COUNTY

Byron Health Center (BHA&C)
12101 Lima Rd., Fort Wayne 46808
Thomas A. Katsanis, Adm.

Colonial Crest Convalescent Center (C)
2940 N. Clinton St., Fort Wayne 46805
Ralph Shafter, Adm.

Covington Manor Nursing Center (C)
5700 Wilkie Dr., Ft. Wayne 46804
Tom Muzzillo, Adm.

Crow's Haven Nursing Home (C)
2440 Bowser Ave., Fort Wayne 46803
Lyle B. and Jeanne E. Crow, Adms.

Fairfield Healthcare Center (C)
2626 Fairfield Ave., Ft. Wayne 46807
John August, Adm.

Fort Wayne Healthcare Center (C)
2001 Hobson Rd., Ft. Wayne 46805
Ruth Brockman, Adm.

Fort Wayne Nursing Home (C)
2402 N. Beacon, Fort Wayne 46805
Margaret Walls, R.N., Adm.

Glenacres Nursing Home, Inc. (C)
3420 E. State St., Fort Wayne 46805
Casto Ball, Adm.

Golden Years Homestead (R&C)
8300 Maysville Road, Fort Wayne 46805
Thomas G. Garman, Adm.

Heritage Manor Nursing Home (C)
7519 Winchester Rd., Ft. Wayne 46819
Carol Sprecht, Adm.

Indian Village Health Center (C)
2237 Engle Road, Fort Wayne 46809
Elizabeth Szegedy, Ph.D., Adm.

Lawton Nursing Home, Inc. (C)
1649 Spy Run Ave., Fort Wayne 46805
Herman H. Aspacher, Adm.

Lutheran Homes, Inc. (R&C)
6701 S. Anthony Blvd., Ft. Wayne 46806
Lucille Scarlett, Adm.

Parnell Park Nursing Home (C)
3811 Parnell Ave., Ft. Wayne 46805
James J. Kelly, Adm.

Saint Anne Home (C)
1900 Randalia Dr., Ft. Wayne 46805
Joseph Weingartner, Adm.

Towne House Health Center (R&C)
5544 E. State Blvd., Fort Wayne 46805
Albert W. Estes, Adm.

University Park Nursing Center (C)
1400 Medical Park Dr.,
Fort Wayne 46825
Robert Shambaugh, Adm.

BARTHOLOMEW COUNTY

Bartholomew County Home (R)
2525 Illinois, Columbus 47201
Mildred Drake, Adm.

Columbus Convalescent Center (C)
2100 Midway St., Columbus 47201
Elizabeth Kerns, Adm.

Columbus Nursing Home (C)
5400 E. 25th Street, Columbus 47201
Diane Burford, Adm.

The Four Seasons Home (R&C)
1901 Taylor Road, Columbus 47201
John Schenck, Adm.

Ken-Joy Convalescent Home (C)
133 Maple Street, Hope 47246
Betty P. Beck, Adm.

Lake View Care Center, Inc. (C)
R.R. 1, Hope 47246
David Eisele, Adm.

BENTON COUNTY

Earl Park Nursing Home (C)
400 Chestnut, Earl Park 47942
Evelyn Taylor, Adm.

Edgewood View Nursing Center, Inc. (C)
State Road #55, Oxford 47971
Leslie Stansell, Adm.

Green-Hill Manor, Inc. (C)
501 N. Lincoln Ave., Fowler 47944
Edith Dexter, R.N. and Connie
Brouillette, R.N., Adms.

BLACKFORD COUNTY

Country Manor Nursing Home (C)
R.R. 2, Box 53A, Hartford City 47348
Janellyn Antrim, R.N., Adm.

Hartford City Community Care Center (C)
715 N. Mill St., Hartford City 47348
Kevin L. May, Adm.

BOONE COUNTY

English Nursing Home, Inc. (C)
1015 N. Lebanon St., Lebanon 46052
Virginia English Amick, Adm.

Golden Manor Health Care Center (C)
Route #2, Box 169, Lebanon 46052
R. Steven Brown, Adm.

The Hoosier Village (R&C)
5300 W. 96th St., Indianapolis 46268
Hilda Johnson, Adm.

Indiana Christian Retirement Park (BHA, R&C)
675 S. Ford Rd., Zionsville 46077
Henry Van Essen, Adm.

Lebanon Nursing Home (C)
301 W. Essex, Lebanon 46052
Linda Chaille, L.P.N., Adm.

Parkwood Health Care, Inc. (C)
1001 N. Grant St., Lebanon 46052
Lowell Canary, Jr., Adm.

BROWN COUNTY

Brown County Crest (C)
Fred Hunderson Dr., Nashville 47448
Fayette Henderson, Adm.

CARROLL COUNTY

Brethren's Home of Indiana, Inc. (C)
R.R. 2, Flora 46929
Rosemary Eddy, Adm.

Delphi Nursing Home (C)
1455 S. Washington St., Delphi 46923
Bruce Goodpaster, Adm.

CASS COUNTY

Camelot Care Center (C)
1555 Commerce St., Logansport 46947
Dorothy Huston, Adm.

Cass County Home (R)
Perrysburg Rd., Logansport 46947
Mabel Frey, Adm.

Chase Manor Nursing and Convalescent Center (R&C)
1 Chase Park, Logansport 46947
Robert R. James, Adm.

The Neal Home (BHA)
2518 George St., Logansport 46947
Mary A. Curless, Adm.

CLARK COUNTY

Clarksville Healthcare Center (C)
286 Eastern Blvd., Clarksville 47130
James Jester, Adm.

Hillcrest Nursing Home, Inc. (C)
203 Sparks Ave., Jeffersonville 47130
Grace Cook, Adm.

Jeffersonville Nursing Home (C)
1720 E. Eighth St., Jeffersonville 47130
Patricia Ragland, L.P.N., Adm.

Kentuckiana Christian Home, Inc. (R&C)
Route 2, Box 39, Charlestown 47111
Stanley Hunt, Adm.

The Ladies Home (R)
330 W. Market St., Jeffersonville 47130
Helen Haynes, Adm.

Maple Manor Christian Home, Inc.— (R&C)
643 W. Utica, Sellersburg 47172
Joseph Blansett, Adm.

Tendercare/Clarksville (C)
517 N. Hallmark Dr., Clarksville 47130
Elliott Roth, Adm.

Twilight Nursing Home, Inc. (C)
418 W. Riverside Dr., Jeffersonville 47130
Delilah J. Swaney, Adm.

CLAY COUNTY

Clay County Health Center, Inc. (C)
1408 E. Hendrix Street, Brazil 47834
Wilma Ellison, Adm.

Harty Nursing Home (C)
P.O. Box 112, Knightsville 47857
William E. Harty, Adm.

Macanell Nursing Home, Inc. (C)
R.R. 2, Box 139, Center Point 47840
Hugh W. McCann, Adm.

CLINTON COUNTY

Clinton Convalescent Center, Inc. (C)
551 E. Walnut St., Frankfort 46041
Laura L. Peterson, Adm.

Frankfort Nursing Home (C)
1234 Rossville Ave., Frankfort 46041
Carolyn Dulin, Adm.

Milner Community Health-Care, Inc. (C)
Box 15, Rossville 46065
Ronald C. Green, Adm.

Mulberry Lutheran Home, Inc. (R&C)
State Road 38, W. Jackson St., Mulberry 46058
Rev. Paul Mumford, Adm.

Parkview Home (R)
R.R. 2, Frankfort 46041
Dorothy M. Schriefer, L.P.N., Adm.

Wesley Manor, Inc. (R&C)
1555 N. Main St., Frankfort 46041
E. Thomas DeHaven, Adm.

DAVIESS COUNTY

Bertha D. Garten Ketcham Memorial Center, Inc. (C)
601 E. Race Street, Odon 47562
Homer E. Robertson, Adm.

Eastgate Manor Nursing and Residential Center, Inc. (C)
P.O. Box 470, Highway 50 East, Washington 47501
Larry N. Morris, Adm.

Hillside Manor (C)
1109 E. National Hwy., Washington 47501
Theron E. Arnold, Adm.

Prairie Village, Inc. (C)
1401 Highway 57, South, Washington 47501
Georgia Atwood, Adm.

Washington Nursing Center, Inc. (C)
603 E. National Highway, Washington 47501
Jerome Walker, Adm.

Washington Nursing Center Annex (C)
209 W. Oak St., Washington 47501
David Snow, Adm.

DEARBORN COUNTY

Dillsboro Manor (R&C)
Box 66, Dillsboro 47018
Dellas and Dorthea Ross, Adms.

Shady Nook Nursing Home (C)
607 Wilson Creek Rd., Lawrenceburg 47025
Mr. & Mrs. W. McMullen, Adms.

Terrace View ECF (C)
403 Bielby Rd., Lawrenceburg 47025
Joseph Henderson, Adm.

DECATUR COUNTY

Greensburg Nursing Home (C)
1420 Lincoln St., Greensburg 47240
Carol Sue Settles, Adm.

Hospitality Nursing Center, Inc. (C)
410 Park Road, Greensburg 47240
Willard Rowland, L.P.N., Adm.

Odd Fellows Home (R&C)
R.R. 8, Greensburg 47240
Darrell S. Ingle, Adm.

DEKALB COUNTY

Betz Nursing Home Inc. (C)
R.R. 3, Auburn 46706
Doris M. Betz, L.P.N., Adm.

Butler Hotel Rest Home, Inc. (C)
117 S. Broadway St., Butler 46721
M. Wendy Partin, Adm.

Glen Oaks Nursing Home (C)
E. Seventh St., St. Rd. 8, Auburn 46706
Dennis Girardot, Adm.

Meadowhaven, Inc. (C)
300 West Liberty, Butler 46721
Dallas Winn, Adm.

Souder Health Care (C)
206 W. 7th St., Auburn 46706
Ruth Muzzillo, Adm.

DELAWARE COUNTY

Alhany Nursing Care, Inc. (C)
State Rd. 67 North, Albany 47320
Nicholas LeFevre, Adm.

Chateau Convalescent Centre (C)
2400 Chateau Drive, Muncie 47303
Betty J. Hickey, Adm.

Friendly Hearth Nursing Center of Muncie, Inc. (C)
633 N. Gavin St., Muncie 47302
Anna Slusher, Adm.

Golden Rule Nursing Home (C)
502 N. Madison St., Gaston 47342
Charles Bellus, Adm.

Parkview Nursing Home (C)
2200 White River Blvd., Muncie 47303
Eileen E. Page, R.N., Adm.

Riverview Convalescent Home (C)
R.R. 2, Box 89, Muncie 47302
Jessie Starks, L.P.N., Adm.

Sylvester Home for the Aged (C)
R.R. 2, Burlington Dr., Muncie 47302
Mantha J. Sylvester, Adm.

Westminster Village Muncie (BHA&C)
5601 Bethel Pike, Muncie 47302
Charles R. Kendrick, Adm.

Woodland Nursing Home (C)
3820 W. Jackson St., Muncie 47304
Hazel Wilson, R.N., Adm.

DUBOIS COUNTY

Huntinghurg Convalescent Center, Inc. (C)
1712 Leland Dr., Huntingburg 47542
Marilyn Williams, Adm.

Jasper Nursing Center, Inc. (C)
2909 Howard Dr., Jasper 47546
John L. Wehrle, Adm.

Medco Center of Huntingburg (C)
530 Fourth St., Huntingburg 47542
James Camp, Adm.

Northwood Good Samaritan Center (C)
P.O. Box 459, Jasper 47546
Richard E. Faught, Adm.

Providence Home (R)
520 W. Ninth Street, Jasper 47546
Father Thaddeus Sztuczko, F.D.P., Adm.

ELKHART COUNTY

Americana Healthcare Center of Elkhart (C)
343 S. Nappanee St., Elkhart 46514
John B. Seaver, Adm.

Elkhart Healthcare Center (C)
1400 W. Franklin, Elkhart 47514
Hugh Erickson, Adm.

Fountainview Place (R&C)
1001 W. Hively Ave., Elkhart 46514
V. Lloyd White, Adm.

Fountainview Place of Goshen (R&C)
2400 College Ave., Goshen 46526
Carol V. Simmons, Adm.

Goshen Nursing Home (C)
1101 W. Lincoln Ave., Goshen 46526
Betty Montgomery, Adm.

Greencroft Nursing Center (C)
2000 South 15th St., Goshen 46526
John Liechty, Adm.

Huhhard Hill Estates, Inc. (R&C)
28070 County Road 24, Elkhart 46514
Floran Mast, Adm.

Lu-Ann Nursing Home (C)
952 W. Walnut St., Nappanee 46550
John L. Mellinger, Adm.

Medco Center of Elkhart (C)
2600 Morehouse Ave., Elkhart 46514
Paul Ward, Adm.

FAYETTE COUNTY

Connersville Care Center (C)
2500 Iowa St., Connersville 47331
Roberta K. Caldwell, Adm.

Connersville Nursing Home (C)
2600 N. Grand Ave., Connersville 47331
Fred Stubbs, Adm.

Lincoln Lodge Nursing Center (C)
1029 E. 5th St., P.O. Box 446, Connersville 47331
Goldie O'Neal, Adm.

Lincoln Manor Nursing Center (C)
P.O. Box 368, Connersville 47331
Chester O'Neal, Jr., Adm.

FLOYD COUNTY

Green Valley Convalescent Center (C)
3118 Green Valley Rd., New Albany 47150
Peter Graves, Adm.

Lincoln Hills of New Alhany (C)
326 Country Club Dr., New Albany 47150
Paul A. Ferry, Jr., Adm.

New Alhany Nursing Care Home (C)
1919 Bono Road, New Albany 47150
Mary L. Tindle, L.P.N., Adm.

Providence Retirement Home (R&C)
703 E. Spring St., New Albany 47150
Sister Alice Ann, Adm.

FOUNTAIN COUNTY

Covington Manor, Inc. (C)
1600 Liberty St., E., Covington 47932
J. D. Piech, Adm.

Woodland Manor Nursing Center (C)
P.O. Box 166, Attica 47918
Linda L. Short, Adm.

FRANKLIN COUNTY

Elsie Dreyer Nursing Home (R&C)
273 Main St., Brookville 47012
Melvin Brunner, Adm.

FULTON COUNTY

Canterbury Manor (C)
R.R. 6, County Road 50 North, Rochester 46975
Carl William Miller II, Adm.

Rochester Nursing Home (C)
240 E. 18th St., Rochester 46975
Joan Swanson, Adm.

GIBSON COUNTY

Forest Del Convalescent Home Inc. (C)
1020 W. Vine St., Princeton 47570
Kenneth Maikranz, Adm.

Good Samaritan Home Inc. (C)
210 N. Gibson St., Oakland City 47560
Hovey Hedges & Donald Bogan, Adms.

Holiday Manor, Inc. (C)
305 Carol Ave., Princeton 47570
Larry D. Carlson, Adm.

Oakland City Rest Home (C)
114 Grove St., Oakland City 47560
Lloyd Higgins, Adm.

Owensville Convalescent Center (C)
Highway 165, P.O. Box 368 Owensville 47565
Eugene Hall, Adm.

GRANT COUNTY

Bradner Village Residential Care Facility, Inc. (BHA, R&C)
505 Bradner Ave., Marion 46952
James J. Walts, Adm.

Emily E. Flinn Home, Inc. (R&C)
615 W. 12th St., Marion 46952
Richard Lovelace, Adm.

Golden Age Nursing Home (C)
1800 Kem Rd., Marion 46952
Rebecca McPherson, Adm.

River-View Manor Nursing Home (C)
221 N. Washington, Marion 46952
Sharon Myers, Adm.

Twin City Nursing Home (C)
627 East-North "H" St., Gas City 46933
Margaret Knox, Adm.

University Nursing Center (C)
University Avenue, Upland 46989
Margaret J. Crick, Adm.

Wesleyan Nursing Home (C)
518 W. 36th St., Marion 46952
E. Barton Carter, Adm.

GREENE COUNTY

Bloomfield Nursing Center (C)
150 N. Seminary St., Bloomfield 47424
Norman Nierste, Adm.

Glenburn Rest Haven Home, Inc. (C)
Glenburn Rd., R.R. 2, Linton 47441
William Thomas Fisher, Adm.

Linton Nursing Home (C)
1501 East A Street, Linton 47441
Rosemary Eddy, Adm.

Shakamak Good Samaritan Center (C)
800 E. Ohio, Jasonville 47438
Dennis Gibbs, Adm.

HAMILTON COUNTY

Arcadia Children's Home (C)
303 Franklin Ave., Arcadia 46030
Leonard A. Hall, Adm.

Cardinal Care Centers of Westfield, Inc. (C)
R.R. 2, Box 700, Westfield 46074
Robert Oldham, Adm.

Carmel Care Center (C)
118 Medical Drive, Carmel 46032
Stephen L. Spaugh, Adm.

Hamilton Heights Health Center (C)
706 W. Main St., Arcadia 46030
Lester M. Roland, Adm.

Lakeview Nursing Facility (C)
2907 E. 136th St., Carmel 46032
Paul D. Walters, Adm.

Noblesville Healthcare Center (C)
295 Westfield Rd., Noblesville 46060
Stephen J. Minniear, Adm.

Noblesville Nursing Home (C)
1391 Greenfield Pike, Noblesville 46060
Kim King, Adm.

Rollins Home for Retarded Children (C)
69 N. Harrison St., Cicero 46034
Jane G. Fenn, Adm.

Sheridan Health Care Center, Inc. (C)
903 Sheridan Ave., Sheridan 46069
Jeanne Roeder, Adm.

Walston Nursing Home for Children (C)
Route #1, Cicero 46034
Vivian Beam, Adm.

HANCOCK COUNTY

Colonial Crest Convalescent Center, Inc. (C)
745 N. Swope St., Greenfield 46140
Steven Harris, Adm.

Community Care Center of Greenfield (C)
R.R. 8, Box 483A, Greenfield 46140
June Melton, Adm.

Crescent Manor Nursing Home (C)
1310 E. Main St., Greenfield 46140
Margaret Cronin, Adm.

Sugar Creek Convalescent Center, Inc. (c)
R.R. 7, Box 70, Greenfield 46140
Kenneth R. Smith, Adm.

HARRISON COUNTY

Corydon Nursing Home (C)
Route 6, Box 147, Corydon 47112
Floyd A. Shewmaker, Adm.

HENDRICKS COUNTY

Danville Nursing Home (C)
337 W. Lincoln St., Danville 46122
Barbara Hamilton, R.N., Adm.

Golden Manor Health Care Center (C)
Hornaday Rd., Brownsburg 46112
James R. Gephart, Adm.

Golden Rule Nursing Home (C)
Road 3 S. and 400 East
Danville 46122
Robert Petree, Adm.

Hendricks County Home (R)
865 E. Main, Danville 46122
Edna O. Anderson, Adm.

Tendercare/Danville (C)
255 Meadow Drive, Danville 46122
Diane Cosby, Adm.

Vinewood Nursing Home, Inc. (C)
404 North Vine St., Plainfield 46168
Linda Patterson, Adm.

HENRY COUNTY

Heritage House, Inc., of New Castle, Indiana (C)
P.O. Box 546, New Castle 47362
S. J. Williams, Adm.

Holly Hill Nursing Home (C)
901 N. 16th St., New Castle 47362
Giles Krupp, Adm.

Lewisville Hotel for Senior Citizens (R)
Box 98, U. S. 40, Lewisville 47352
Sarah E. Vollmer, Adm.

Maple Village Nursing Home, Inc. (C)
Box 135, Middletown 47356
F. Richard King, Adm.

Middletown Nursing Center (C)
130 S. 10th St., Middletown 47356
Larry A. Jones, Adm.

New Castle Community Care Center (C)
115 N. 10th Street, New Castle 47362
Roger J. Scheidler, Adm.

New Castle Healthcare Center (C)
990 N. 16 St., New Castle 47362
James W. Alexander, Adm.

HOWARD COUNTY

Americana HealthCare Center of Kokomo (C)
3518 S. Lafountain St., Kokomo 46901
Dorothy Fordyce, Adm.

Forrest Park Healthcare Center (C)
2233 W. Jefferson St., Kokomo 46901
Carolyn Smith, Adm.

Kokomo Nursing Home (C)
1560 S. Plate St., Kokomo 46901
Linda Crowe, L.P.N., Adm.

Sycamore Village Health Center (C)
2905 W. Sycamore, Kokomo 46901
John Singleton, Adm.

Windsor Estates of Kokomo (C)
429 Lincoln Rd. W., Kokomo 46901
Janet Courtney, Adm.

HUNTINGTON COUNTY

Huntington Nursing Home (C)
1425 Grant St., Huntington 46750
Virginia Griggs, R.N., Adm.

Miller's Merry Manor, Inc. (C)
1500 Grant St., Huntington 46750
James C. Powell, Adm.

Norwood Nursing Center (C)
R.R. 8, Maple Grove Rd., Huntington 46750
Suzanne Whitted, Adm.

United Methodist Memorial Home (R&C)
State Road 5, North Warren 46792
Philip Souder, Adm.

JACKSON COUNTY

Hoosier Christian Village (R&C)
621 S. Sugar, Brownstown 47220
William Way, Adm.

Jackson Park Convalescent Center, Inc. (C)
707 Jackson Park Dr., Seymour 47274
Richard C. Schriever, Adm.

Lutheran Community Home, Inc. (R&C)
111 W. Church Ave., Seymour 47274
Donald Bruce, Adm.

R & S Nursing Center, Inc. (C)
202 W. Sixth St., Seymour 47274
Dr. Roger A. Russell, Adm.

JASPER COUNTY

Rensselaer Care Center (C)
1109 E. Grace, Rensselaer 47978
Larry Lee Vanderwielen, Adm.

JAY COUNTY

Country Manor Nursing Home, Inc. (C)
Route 2, Dunkirk 47336
Richard T. Antrim, Adm.

Portland Community Care Center (C)
200 N. Park St., Portland 47371
Richard May, Adm.

JEFFERSON COUNTY

Clifty Falls Convalescent Center (C)
950 Cross Ave., Madison 47250
Ailene Breitenbach, Adm.

Hanover Nursing Center (C)
S. R. 56 W., Hanover 47243
Ann Breitenbach, R.N., Adm.

Madison Nursing Home (C)
1945 Cragmont St., Madison 47250
Alice Rogers, Adm.

Mayfield Nursing Home (C)
702-710 Elm St., Madison 47250
George A. Mayfield & S. Williamson, Adms.

JENNINGS COUNTY

North Vernon Nursing Home (C)
801 N. Elm Street, North Vernon 47265
Frances J. Cherry, R.N., Adm.

JOHNSON COUNTY

Faith Home (C)
P.O. Box 218, Edinburg 46124
Benton M. Harlan, Adm.

Franklin Nursing Home (C)
1130 N. Main St., Franklin 46131
Mary L. Johnson, Adm.

Franklin United Methodist Home (R&C)
1070 W. Jefferson, Franklin 46131
Norman E. Amtower, Adm.

Greenwood Convalescent Center (C)
937 Fry Rd., Greenwood 46142
Pat Blevins, Adm.

Homeview Convalescent Center (C)
651 S. State St., Franklin 46131
George Nichols, Adm.

Indiana Masonic Home (R)
Old State Road 31, Franklin 46131
Marvin Isley, Adm.

The Welcome Nursing Home (C)
1109 N. Main St., Franklin 46131
Mary Lou Ingle, Adm.

Westminster Village (R&C)
U.S. 31 South, Greenwood 46142
Edwin C. Gordon, Adm.

KNOX COUNTY

Crestview Convalescent Home (C)
Box 136, Old Bruceville Rd., Vincennes 47591
Joy M. Thornberry, R.N., Adm.

Freelandville Community Home, Inc. (C)
Highway #58, Freelandville 47535
Mary Joyce Buescher, Adm.

Moore's Nursing Home, Inc. (C)
204 W. Third St., Bicknell 47512
Ernest P. and Barbara J. Moore, Adms.

Vincennes Nursing Home, Inc. (C)
1202 S. 16th St., Vincennes 47591
Joe Junod Jr., Adm.

Willow Manor Convalescent Center (C)
1321 Willow St., Vincennes 47591
Roberta Kay Cresgy, Adm.

KOSCIUSKO COUNTY

Mason Health Care Facility (C)
2501 E. Center St., Warsaw 46580
Carlyle E. Mason, Adm.

Miller's Merry Manor, Inc. (C)
P.O. Box 387, County Farm Rd., Warsaw 46580
R. James Miller, Adm.

Prairie View Rest Home, Inc. (C)
300 Prairie St., Warsaw 46580
N. Charlene Bradbury, Adm.

Warsaw Nursing Home (C)
2402 E. Center St., Warsaw 46580
Alice V. Rees, Adm.

LAGRANGE COUNTY

LaGrange Nursing Home (C)
R.R. 5, Box 122, LaGrange 46761
Marilyn Stimmer, Adm.

Miller's Merry Manor, Inc. (C)
State Road 9 North, LaGrange 46761
Phyllis Ann Miller, Adm.

LAKE COUNTY

Colonial Nursing Home, Inc. (C)
119 N. Indiana Ave., Crown Point 46307
Barbara A. Slosson and Laura M. Gumbiner, Adms.

East Chicago Rehabilitation and Convalescent Center, Inc. (C)
5025 McCook Ave., East Chicago 46312
Jerry H. Henderson, Jr., Adm.

Fountain View Manor (C)
2901 W. 37th Ave., Hobart 46342
Carl Raskin, Adm.

Fuchs' Nursing Home, Inc. (C)
255 Burnham St., Lowell 46356
Barbara H. and Phyllis Fuchs, Adms.

Gary Convalescent Home, Inc. (C)
386 Mount St., Gary 46406
Joseph Fertel, Adm.

Green's Geriatric Health Center, Inc. (C)
2052 Delaware St., Gary 46407
Benjamin J. Green, Adm.

Hammond Nursing Home (C)
1402 E. 173rd St., Hammond 46320
Robert Graves, Adm.

Hammond-Whiting Convalescent Center (C)
1000—114th St., Whiting 46394
Nancy K. Wiggins, Adm.

Highland Nursing Home (C)
9630 Fifth St., Highland 46322
Bonnie Mae Ziller, Adm.

Lake County Convalescent Home (C)
2900 W. 93rd Ave., Crown Point 46307
Dorothy Gaski, Adm.

Lutheran Home of NW Indiana, Inc. (R&C)
1200 W. 121st Ave., P.O. Box A, Crown Point 46307
R. John Henkel, Adm.

Miller Nursing Home, Inc. (C)
2301 Adams St., Gary 46407
Ida Miller Walker, Adm.

Mills Rest Home (C)
5011 Maryland St., Gary 46409
David L. Mills & Audrey Mills, Adms.

Munster Med-Inn (C)
7935 Calumet Ave., Munster 46321
Jean Robinson, Adm.

Ross Care Center (C)
601 W. 61st Ave., Merrillville 46410
Richard N. Shaparo, Adm.

St. Ann's Home (R)
5927 Columbia Ave., Hammond 46320
Arthur W. March, Adm.

St. Anthony Home (R&C)
201 Franciscan Rd., Crown Point 46307
Lawrence T. Filosa, Adm.

Sebo Heritage Manor Nursing Home (C)
4410 W. 49th Ave., Hobart 46342
Wanda Sebo, Adm.

Simmons Loving Care Health Facility (C)
700 E. 21st Ave., Gary 46407
Anna L. Simmons and Herberta B. Miller Adms.

West Side Nursing Home (C)
353 Tyler St., Gary 46402
Gerald Rothenberg, Adm.

Wildwood Manor, Inc. (C)
1964 Clark Rd., Gary 46404
Doris E. Williams, Adm.

LAPORTE COUNTY

Beach Cliff Lodge Nursing Home (C)
1001 Lake Shore Dr., Michigan City 46360
Janice Butcher, R.N., Adm.

The Countryside Place (C)
1700 "I" St., LaPorte 46350
John Kukla, Adm.

Fountainview Terrace (R&C)
1900 Andrew Ave., LaPorte 46350
Ed Kuc, Adm.

Lakeside Health Center Inc. (C)
802 Highway 20, East, Michigan City 46360
Donald G. Cowen, Adm.

Red Oaks Rehab. & Conv. Center (R&C)
910 S. Carroll Ave., Michigan City 46360
Maryann Oszascik, R.N., Adm.

Wedow Private Home Care (R)
602 Spring St., Michigan City 46360
Wilbur Wedow, Adm.

Woodview Rehabilitation Center (C)
1101 E. Coolspring Ave.
Michigan City 46360
Frank Estes, Adm.

LAWRENCE COUNTY

Bedford Nursing Home (C)
514 E. 16th St., Bedford 47421
Nellie M. Camp, Adm.

Hospitality House (C)
2122 Norton Lane, Bedford 47421
Maribelle S. Dyer, Adm.

Mitchell Manor C)
Hwy. 37 & 60, Mitchell 47446
Mary Williams, Adm.

NHE/Bedford (C)
1510 Clinic Drive, Bedford 47421
Marilyn Johnson, Adm.

MADISON COUNTY

Americana Healthcare Center of Anderson (C)
1345 N. Madison Ave., Anderson 46011
Betty Crum, Adm.

Anderson Healthcare Center (C)
1809 N. Madison Ave., Anderson 46012
Kent Stephens, Adm.

Bradford Nursing Home (R&C)
625 W. Adams St. Alexandria 46001
Marilyn Vironet, Adm.

Dickey Nursing Home, Inc. (C)
1007 N. 9th, Elwood 46036
Dianne Blackford, Adm.

The Goble Home (R&C)
332 W. 11th St., Anderson 46016
Dillard Marcum, Adm.

New Haven Nursing Home (C)
1023 E. Eighth St., Anderson 46012
Josephine Wade, L.P.N., Adm.

Parkview Convalescent Centre (C)
North 19th St., Elwood 46036
Rev. Max Bingham, Adm.

Rolling Hills Convalescent Center, Inc. (C)
1821 Lindberg Rd., Anderson 46012
Jeff A. Cooper, Adm.

Summit Convalescent Center, Inc. (C)
R. R. 1, Summitville 46070
Richard Goodman, Adm.

The Willows
R.R. 4, Box 220, Alexandria 46001
Marian E. Webb, L.P.N., Adm.

MARION COUNTY

Ada's Golden Age, Inc. (C)
2115 N. Central Ave., Indianapolis 46202
Keith F. Seal, Adm.

The Alpha Home (C)
1910 N. Senate Ave., Indianapolis 46202
Shirlee Butler, Adm.

The Altenheim Community, Inc. (BHA, C)
3525 E. Hanna, Indianapolis 46227
Robert Frey, Adm.

Americana Health Care Center of Indianapolis—Midtown (C)
2010 N. Capitol Ave., Indianapolis 46202
Eugene Caldwell, Adm.

Americana Nursing Center of Indianapolis—East (C)
5600 E. 16th St., Indianapolis 46218
Fred Moon, Adm.

Americana Healthcare Center of Indianapolis—North (R&C)
8350 Naab Road, Indianapolis 46260
Gerald W. McGowan, Adm.

Anthony Hall Nursing Home, Inc. (C)
2135 N. Alabama St., Indianapolis 46202
Larry Gray, Adm.

The Barton House (C)
505 N. Delaware, Indianapolis 46204
Audrey Bonner, Adm.

Beech Grove Healthcare Center (C)
2002 Albany Ave., Beech Grove 46107
Paul C. Ade, Adm.

Bel-Terrace Nursing Home, Inc. (C)
1629-33 N. College Ave., Indianapolis 46202
Thelma Wray, L.P.N., Adm.

Bethany Village (R&C)
3518 Shelby St., Indianapolis 46227
Archer Cogie, Adm.

Booker Watts Nursing Home (C)
2523 Central, Indianapolis 46205
Herbert Watts, Adm.

Broad Ripple Nursing Home (C)
6127 N. College Ave.
Indianapolis 46220
Josephine Lauth, Adm.

Chateau de Repos, Inc. (C)
5055 W. 52nd St., Indianapolis 46254
Doris Stuart Lizama, L.P.N., Adm.

Colonial Crest Convalescent Center, 86th St. (C)
2002 W. 86th St., Indianapolis 46260
Martin Hipschman, Adm.

Colonial Crest Convalescent Center-North (C)
8181 Harcourt Road, Indianapolis 46260
Anna Hyden, Adm.

Colonial Crest Convalescent Center South (C)
2860 Churchman Ave.
Indianapolis 46203
Dr. Floyd M. Myers, Jr., Adm.

Colonial Crest Nursing Center, Inc. (C)
7145 E. 21st St., Indianapolis 46219
Arthur J. Mirkin, Adm.

Community Children's Nursing Home (C)
6855 E. 10th St., Indianapolis 46219
Gwendolyn Suttle, Adm.

Continental Convalescent Center (C)
344 S. Ritter, Indianapolis 46219
Doris J. Wanders, Adm.

Courtney's Rest Home (BHA)
3302-3312 Washington Blvd.
Indianapolis 46205
Margaret Payne, Adm.

Crestview Manor Nursing Home (C)
1118 East 46th St., Indianapolis 46205
Margaret Cronin, Adm.

Dailey's Convalescent Home, Inc. (C)
2926 N. Capitol Ave., Indianapolis 46208
Anderson T. Dailey, Adm.

Delaware Nursing Home (C)
1910 N. Delaware, Indianapolis 46202
Veda Y. Powell, Adm.

Del Mar Nursing Home, Inc. (C)
709 S. Lynhurst Dr., Indianapolis 46241
Helen J. Harbison, Adm.

Eastside Healthcare Center (C)
1302 N. Lesley Ave., Indianapolis 46219
Karyn J. Price, Adm.

Emerson Nursing Home (C)
3420 N. Emerson Ave., Indianapolis 46218
Warren Hotte, Adm.

Fairfield Nursing Home (C)
3630 Central, Indianapolis 46205
Margaret Carpenter, Adm.

Fountainview Place of Indianapolis (R&C)
5353 E. Raymond, Indianapolis 46203
John A. Williams, Adm.

Frame House, Inc. (C)
1316 N. Tibbs Ave., Indianapolis 46222
David L. McCarroll, Adm.

Frame Nursing Home, Inc. (C)
373 N. Holmes Ave., Indianapolis 46222
James R. McCarroll, Adm.

Garfield Park Nursing Home (C)
2630 S. Keystone, Indianapolis 46203
Jacqueline Livingston, Adm.

Greenview Manor, Inc. (C)
1700 N. Illinois St., Indianapolis 46202
Richard Lewis, Adm.

Hooverwood (C)
7001 Hoover Rd., Indianapolis 46260
Lazer D. Brener, Adm.

Independent Living Club (BHA)
6038 W. 25th St., Indianapolis 46224
Robert Roland, Adm.

Indianapolis Retirement Home (R&C)
1731 N. Capitol Ave., Indianapolis 46202
Betty Sell, R.N., Adm.

Lakeview Manor, Inc. (C)
45 Beachway Dr., Indianapolis 46224
Thomas F. Tyson, Jr., Adm.

Lawrence Manor Nursing Home (C)
8935 E. 46th St., Indianapolis 46226
Mark Feeser, Adm.

Lynhurst Nursing Home, Inc. (R&C)
5225 W. Morris St., Indianapolis 46241
James E. Hill, Sr., Adm.

Mapleton Nursing Home (C)
3650 Central Ave., Indianapolis 46205
Helen Harris, Adm.

Marion County Home (R&C)
11850 Brookville Rd., Indianapolis 46239
Henry H. Bahner, Adm.

Mayfair Home (R)
3240 Washington Blvd., Indianapolis 46205
Joseph Ewbank, Adm.

Meridian Nursing Home (C)
2102 S. Meridian Street, Indianapolis 46225
Neville Humphrey, Adm.

Mount Zion Geriatric Center (C)
3549 Boulevard Pl., Indianapolis 46208
Victor J. Russell, Adm.

New Hope Foundation of Ind., Inc. (C)
8450 N. Payne Rd., Indianapolis 46268
G. E. Doughty, Adm.

Northside Healthcare Center (C)
2140 W. 86th St., Indianapolis 46260
E. Randall Wright, Adm.

Northwest Manor Nursing Home (C)
6640 West 34th St., Indianapolis 46224
Jennifer A. Knoll, R.N., Adm.

Parkview Manor Nursing Home (C)
2424 E. 46th St., Indianapolis 46205
Albert Harris, Jr., Adm.

Pleasant View Lodge (C)
R.R. 12, Box 403, Indianapolis 46236
Margaret McCreary, Adm.

Riley Nursing Home (C)
901 N. East St., Indianapolis 46202
Doris Loudermilk, Adm.

Rural Nursing Home (C)
1747 N. Rural, Indianapolis 46218
Marilyn Conner, L.P.N., Adm.

St. Augustine Home for the Aged (R&C)
2345 W. 86th St., Indianapolis 46260
Sister Stephen Marie Cronin, Adm.

St. Paul Baptist Church Home for the Aged (C)
1141-45 N. Sheffield Ave., Indianapolis 46222
Anna Dailey, Adm.

St. Paul Baptist Church Home (C)
1141-45 N. Sheffield Ave., Indianapolis 46222
Anna L. Dailey, Adm.

St. Paul Hermitage (R&C)
501 N. 17th St., Beech Grove 46107
Sister Mary Gilbert Schipp, O.S.B., Adm.

Sarah's Nursing Home (C)
3208 N. Sherman Dr., Indianapolis 46218
Dorothy Morrison, Adm.

Scott Manor Nursing Home, Inc. (C)
3405 N. Ralston, Indianapolis 46218
Leo Scott, D.D.S. & B. Scott, Adms.

Southeastern Nursing Home (C)
4743 Southeastern Ave., Indianapolis 46203
E. Lucille Smith, L.P.N., Adm.

Southside Healthcare Center (C)
525 E. Thompson Rd., Indianapolis 46227
Rosemary Lain, Adm.

Stone Manor Convalescent Home (C)
8201 W. Washington St., Indianapolis 46231
Jeremy Carter, Adm.

Three Sisters Nursing Home, Inc. (C)
6130 N. Michigan Rd., Indianapolis 46208
Mamie Beamon, Adm.

Warren Park Nursing Home (C)
6855 E. 10th, Indianapolis 46219
Alberta Mercer, Adm.

Westminster Village North Health Center (C)
11050 Presbyterian Dr., Indianapolis 46236
David Peters, Adm.

Westview Nursing Home (C)
5435 West 38th St., Indianapolis 46254
John Jennings, Adm.

MARSHALL COUNTY

Kingston Nursing Home (C)
309 Kingston Drive, Plymouth 46563
Arlene Thomas, Adm.

Miller's Merry Manor, Inc. (C)
600 W. Oakhill Ave., Plymouth 46563
Jane K. Miller, R.N., Adm.

Pilgrim Manor Rehabilitation and Convalescent Center (C)
222 Parkview St., Plymouth 46563
G. Dean Byers, Adm.

R.N. Nursing Home (C)
R. R. 1, Walkerton 46574
Laura M. Hathaway, R.N., Adm.

Shady Rest Home (R)
R. R. 5, Plymouth 46563
Kathryn Krueger, L.P.N., Adm.

TLC Nursing Home, Inc. (C)
R. R. 3, Box 269, Bremen 46506
Pauline Studt, Adm.

MARTIN COUNTY

Medco Center of Loogootee (C)
R. R. 4, Loogootee 47553
Sheila Clark, Adm.

MIAMI COUNTY

Miller's Merry Manor, Inc. (R&C)
317 Blair Pike, Peru 46970
Alan Grossnickle, Adm.

Peru Nursing Home (C)
390 West Blvd., Peru 46970
Michael David Drook, Adm.

MONROE COUNTY

Bloomington Convalescent Center (C)
714 S. Rogers St., Bloomington 47401
Mr. Carroll Moore, Adm.

Bloomington Nursing Home (C)
120 E. Miller Dr., Bloomington 47401
William Doub, Adm.

Fontanbleu Nursing Center (C)
3305 South Highway 37, Bloomington 47401
J. L. Huffer, Adm.

Hospitality House, Inc. (R&C)
1100 S. Curry Pike, Bloomington 47401
Fred J. Ponton, Adm.

MONTGOMERY COUNTY

Ben Hur Home, Inc. (C)
1375 S. Grant, Crawfordsville 47933
Esther Houston, Adm.

Carmen Nursing Home Inc. (C)
817 N. Whitlock Ave., Crawfordsville 47933
Cline Harbison, Adm.

Golden Manor Health Care Center (C)
1001 E. Main St., Ladoga 47954
Danny Lee Gerald, Adm.

Houland House Health Care Center, Inc. (R&C)
1371 S. Grant Ave., Crawfordsville 47933
Steven Dehne, Adm.

Lane House, Inc. (C)
1000 Lane Ave., Crawfordsville 47933
Richard A. Bowles, L.P.N., Adm.

MORGAN COUNTY

Cherry Nursing Home (C)
60 E. Harrison St., Martinsville 46151
Timothy Hall, Adm.

Countryaire Manor, Inc. (C)
259 W. Harrsion St., Mooresville 46158
Janice E. Murphy, Adm.

GrandView Manor (C)
2009 E. Columbus St., Martinsville 46151
Shirlene Shockley, Adm.

Henderson Nursing Home, Inc. (C)
140 W. Washington St., Morgantown 46160
E. Marguerite Henderson, Adm.

Heritage House Convalescent Center (C)
2055 Heritage Dr., Martinsville 46151
Loyd Cunningham, Adm.

Kennedy Memorial Christian Home, Inc. (R&C)
210 W. Pike St., Martinsville 46151
Bill Carter, Ed.D., Adm.

NEWTON COUNTY

Kentland Nursing Home (C)
720 E. Washington St., Kentland 47591
Inajean Goodwin, Adm.

Lake Holiday Manor Nursing Home (C)
10325 County Line Road, DeMotte 46310
Eric Borman, Adm.

NOBLE COUNTY

Kendallville Nursing Home (C)
1433 S. Main St., Kendallville 46755
Byron Colglazier, Adm.

Lutheran Homes, Inc. (R&C)
612 E. Mitchell, Kendallville 46755
Paul Dobler, Adm.

Sacred Heart Home (R&C)
State Road 3, Avilla 46710
Sister M. Theodora Wessell, Adm.

Strawberry Village Health Care Center (C)
Pontiac St., Ligonier 46767
Norman L. Savage, Adm.

OHIO COUNTY

Rising Sun Nursing Home (C)
Rio Vista Ave., Rising Sun 47040
Howard Goodman, Adm.

ORANGE COUNTY

Medco Annex of French Lick (C)
R.R. 2, French Lick 47432
Patricia Sanders, Adm.

Medco Center of French Lick (C)
Box 350, East College, French Lick 47432
Dale C. Walters, Adm.

Paoli Nursing Home (C)
111 W. Hospital View Rd., Paoli 47454
William Howard, Adm.

OWEN COUNTY

Donna Nursing Home #2 (C)
R. R. 2, Spencer 47460
Norman S. Tirsway, Adm.

Gosport Nursing Home, Inc. (C)
South Seventh St., Gosport 47433
Leland S. Lynch, Adm.

Owen County Home (R)
R.R. 3, Spencer 47460
Ruthie Gray, Adm.

PARKE COUNTY

Castle Shannon Nursing Home (C)
R.R. 3, Box 251, Rockville 47872
Kevin Clouser, Adm.

Parke County Nursing Home (C)
R.R. 3, Box 259, Rockville 47872
Gerald Ball, Adm.

PERRY COUNTY

Lincoln Hills Nursing Home, Inc. (C)
19th and Pestalozzi, Tell City 47586
Roger Ambrose, Adm.

PIKE COUNTY

Holiday Home (C)
Pike Ave., Petersburg 47567
Franklin T. Stevenson, Adm.

PORTER COUNTY

Canterbury Place (C)
251 E. Drive, Valparaiso 46383
James L. Fischer, Adm.

Vale View Convalescent Center (C)
606 Wall St., Valparaiso 46383
C. Jane Graves, Adm.

Whispering Pines Home for Senior Citizens (C)
3301 N. Calumet Ave., Valparaiso 46383
Jeanette Dolk, Adm.

The Willows (C)
1000 Elizabeth, Valparaiso 46383
Nettie DuSold, Adm.

POSEY COUNTY

Allison Nursing Home Inc. (C)
Locust St., Poseyville 47633
Debra C. Stoneberger, Adm.

The Charles Ford Memorial Home (R)
920 S. Main St., New Harmony 47631
Gregory Nelson, Adm.

Medco Center of Mt. Vernon, Indiana (C)
1415 Country Club Rd., Mount Vernon 47620
Ralph Marker, Adm.

Merimac Nursing Home (C)
P.O. Box 275, Cynthiana 47612
Martha Scheller, Adm.

Parkview Haven (R&C)
P.O. Box 797, Francesville 47946
Elmer J. Bucher, Adm.

PULASKI COUNTY

Winamac Nursing Home (C)
515 East 13th Street, Winamac 46996
Benjamin Crandall, Adm.

PUTNAM COUNTY

Asbury Towers (R&C)
102 W. Poplar St., Greencastle 46135
Rev. Dr. Donald McMahan, Adm.

Donna Nursing Home (C)
P.O. Box 247, Cloverdale 46120
MaDonna Tirsway Floyd, Adm.

Eventide Rest Home (C)
1306 S. Bloomington St., Greencastle 46135
Mary Jane Detwiler, Adm.

Greencastle Nursing Home (C)
815 E. Tacoma Dr., Greencastle 46135
Marquerite Boerger, Adm.

Sunset Manor Nursing Home, Inc. (C)
1109 S. Indiana St., Greencastle 46135
Jack L. Cross, Adm.

RANDOLPH COUNTY

Chrystal's Country Home, Inc. (C)
Randolph St., Parker 47368
Robert E. Steele, Adm.

Parrott's Home (R)
304 W. Sherman St., Lynn 47355
Maxine Parrott, Adm.

Randolph Nursing Home, Inc. (C)
701 S. Oak St., Winchester 47394
Everett Rickert, Adm.

RIPLEY COUNTY

Dreyerhaus (C)
958 E. Highway 46, Batesville 47006
Elsie Dreyer, Adm.

Health and Hospitality Center, Inc. (C)
Carr St., Milan 47031
Jon W. Kohlmeier, Adm.

Manderley Nursing Home (C)
546 Wilson St., Osgood 47037
Charles F. Negangard, Adm.

Silver Bell Nursing Home (C)
R.R. 2, Box 106, Versailles 47042
Walter Bradley, Jr., Adm.

RUSH COUNTY

Jackson Nursing Home (C)
612 E. 11th St., Rushville 46173
Marjorie Pearsey, L.P.N., Adm.

ST. JOSEPH COUNTY

Cardinal Manor (R)
118 S. William St. South Bend 46601
Delores J. Polomskey, Adm.

Cardinal Nursing Home, Inc. (C)
1121 E. LaSalle, South Bend 46601
Thomas E. Squibb, Adm.

Carlyle Nursing Home (C)
5124 W. Western Ave., South Bend 46625
Frances Gargano, Adm.

Fountainview Place Corp. of Mishawaka (R&C)
609 W. Tanglewood Ln., Mishawaka 46544
Damaris Smith, Adm.

Golden Age Manor (C)
811 E. 12th St., Mishawaka 46544
Rae Leonard, R.N., Adm.

Hamilton Grove (R&C)
Chicago Trail, New Carlisle 46552
Ilah Hebner, Adm.

Healthwin Hospital (C)
20531 Darden Road, South Bend 46637
Donald Henry, Adm.

Melrose Manor (C)
601 S. Russell St., Mishawaka 46544
Richard N. Shoup, Adm.

Miller's Merry Manor, Inc. (C)
Walkerton Trail, Walkerton 46574
John Tallmadge, Adm.

Morningside Nursing Home (C)
18325 Bailey Ave., South Bend 46637
Sufrona Ryan, Adm.

Portage Manor (R&C)
53308 Portage Rd., South Bend 46628
Joseph W. and Marguerite Snyder, Adms.

Ridgedale Nursing Home (R&C)
1950 E. Ridgedale Rd., South Bend 46614
Diane Kelly, Adm.

River Park Nursing Home (C)
915 27th St., South Bend 46615
Rosemary Mueller, Adm.

Riverside Center, Inc. (C)
1106 S. 20th St., South Bend 46615
Hugh Erickson, Adm.

The Robert P. & Clara I. Milton Home, Inc. (R&C)
216 E. Marion St., South Bend 46601
Elizabeth Steinke, Adm.

South Bend Convalescent Center, Inc. (C)
4600 W. Washington Ave., South Bend 46619
Irene Gumkowski, Adm.

South Bend Nursing Home (C)
328 N. Notre Dame, South Bend 46617
Robert Cox, Adm.

SCOTT COUNTY

Roe-Seal Memorial Home (R)
Englishton Park, Lexington 47138
Janet Heilman, Adm.

Scottsburg Nursing Home (C)
1100 N. Gardner St., Scottsburg 47170
Ollie M. Blagrave, Adm.

Scott Villa Health Care Center, Inc. (C)
R.R. 6, U.S. 31 South, Scottsburg 47170
Susan Russell, Adm.

Williams Manor (C)
10 Todd Drive, Scottsburg 47170
Wanda J. Williams & Barbara K. Fleener, Adms.

SHELBY COUNTY

Ace Placid Home (C)
R.R. 1, Box 350, Fairland 46126
Patsy R. Ferguson, Adm.

The Heritage House Children's Center, Inc. (C)
2325 S. Miller St., Shelbyville 46176
Janet Coers, Adm.

The Heritage House Convalescent Center (C)
2309 S. Miller St., Shelbyville 46176
C. Robert Norman, Adm.

Heritage Manor, Inc. (C)
2311 S. Miller St., Shelbyville 46176
Miss Linda Kuhn, Adm.

Morristown Nursing Home, Inc. (C)
Box 388, Morristown 46161
Martha Waltz, Adm.

Waldron Health Care Home, Inc. (C)
Box 95, Waldron 46182
Kathleen L. Kuhn, Adm.

SPENCER COUNTY

Golden Circle Nursing Center (C)
Highway 68 West, Dale 47523
Donald R. Thomason, Adm.

Nursing Center of Rockport, Inc. (C)
815 Washington St., Rockport 47635
O. Jane Thomason, Adm.

Professional Care Nursing Center, Inc. (C)
R.R. 2, Box 315, Dale 47523
Emma Lou Woolard, Adm.

STARKE COUNTY

The Countryside Place Health Facility (C)
300 Culver Road, Knox 46534
Darlene Terrell, Adm.

Little Company of Mary Health Facility, Inc. (C)
Route 421, San Pierre 46374
Thomas Kramer, Adm.

STEUBEN COUNTY

Angola Nursing Home (C)
600 N. Williams St., Angola 46703
John Eckert, Adm.

Carlin Park Nursing Home, Inc. (C)
P.O. Box 341, Angola 46703
Louis Crissman & Flo Shull, Adms.

Lakeland Nursing Center (C)
500 N. Williams St., Angola 46703
Charles J. Warnick, Adm.

SULLIVAN COUNTY

Sullivan Health Care Center (C)
W. Wolfe St., Sullivan 47882
Oliver R. and Mary J. Blubaugh, Adms.

Village Nursing Home (C)
975 N. Section St., Sullivan 47882
Carla Jean McCammon, Adm.

SWITZERLAND COUNTY

Jackson's Senior Citizens Home (R)
501 West Pike St., Vevay 47043
Peggy Jackson, Adm.

TIPPECANOE COUNTY

Americana Healthcare Center of Lafayette (C)
2201 Cason St., Lafayette 47901
William Rincker, Adm.

Comfort Retirement and Nursing Home, Inc. (C)
312 N. Eighth St., Lafayette 47901
Richard E. Linson, Adm.

Hillcrest Nursing Home (C)
1123 E. South St., Lafayette 47901
Marcia Wrightsman, Adm.

Indiana Pythian Home (R&C)
1501 South 18th Street, Lafayette 47905
Allen Campbell, Adm.

Indiana Veteran's Home (BHA, R&C)
Road 43, North Lafayette 47901
Maj. Robert Hinds, Adm.

Lafayette Care, Inc. (C)
3400 Soldiers Home Rd., W. Lafayette 47906
Mary Robertson, Adm.

Lafayette Healthcare Center (C)
1903 Union St., Lafayette 47901
John Alcott, Adm.

Laura M. Bowles Convalescent Home, Inc. (C)
602 Clark St., Clarks Hill 47930
Joseph Peterson, Adm.

Tippecanoe Villa (R)
5308 N. 50, W. Lafayette 47906
Charles & Dorothy Haan, Adms.

Westminster Village West Lafayette (C)
2741 N. Salisbury St., W. Lafayette 47906
Sheila Diane Guenin, Adm.

TIPTON COUNTY

Higgins Health Facility, Inc. (C)
4 H Rd., P.O. Box 303, Tipton 46072
Hal Higgins, Adm.

Holtsclaw Nursing Home (C)
119 W. Washington St., Tipton 46072
Margaret Holtsclaw, Adm.

Tipton Nursing Home (C)
701 E. Jefferson St., Tipton 46072
Robert Lutz, Adm.

UNION COUNTY

Park Manor Nursing Home (C)
409 E. Union St., Liberty 47353
Elaine Stubbs, R.N., Adm.

VANDERBURGH COUNTY

Bethel Sanitarium, Inc. (R&C)
6015 Kratzville Rd., Evansville 47710
Louise Kuiken, R.N., Adm.

Braun's Nursing Home, Inc. (C)
909 First Ave., Evansville 47710
Ruth H. Braun, L.P.N., Adm.

Dellaren Nursing Care Center (C)
816 North First Ave., Evansville 47710
Martha Winterheimer, Adm.

Evansville Healthcare Center (C)
4301 Washington Ave., Evansville 47715
Ed Shilkett, Adm.

Evansville Protestant Home, Inc. (R&C)
3701 Washington Ave., Evansville 47715
Helen E. Kinkle, Adm.

Gertha's Nursing Home, Inc. (C)
605 Oakley St., Evansville 47710
Richard Gossman, Sr., Adm.

Good Samaritan Home, Inc. (C)
601 N. Boeke, Evansville 47711
N. R. Allsmiller, Adm.

Holiday Home (C)
1201 W. Buena Vista Rd., Evansville 47710
Donnie L. Hester, Adm.

M & R Nursing Home (C)
1100 N. Read St., Evansville 47710
Mary Knight, Adm.

McCurdy Residential Center (R)
101 S.E. First St., Evansville 47713
Herbert Jankins, Adm.

Medco Center of Evansville-North, Inc. (C)
650 Fairway Dr., Evansville 47710
John W. Miller, Adm.

Parkview Convalescent Center, Inc. (C)
2819 N. St. Joseph Ave., Evansville 47712
Charles J. Lucwyck, Adm.

Pine Haven Nursing Home, Inc. (C)
3401 Stocker Dr., Evansville 47712
James F. Stocker, R.N., Adm.

Rathbone Memorial Home (R)
1320 S. E. Second St., Evansville 47713
Mary Pierson, Adm.

Regina Pacis Home (R&C)
3900 Washington Ave., Evansville 47715
Raymond Heinen, Adm.

St. John's Home for the Aged (R&C)
1236 Lincoln Ave., Evansville 47714
Lucienne Garrison, Adm.

VERMILLION COUNTY

Clinton Nursing Home (C)
700 S. Main St., Clinton 47842
Betty June Payton, L.P.N., Adm.

Vermillion Convalescent Center (C)
Outer S. Main St., Box 1A, Clinton 47842
Robert M. Cahill, Adm.

VIGO COUNTY

Canterbury Convalescent Centre (C)
500 Maple Ave., Terre Haute 47804
William A. Schofield, Sr., Adm.

Clara Fairbanks Home, Inc. (R&C)
721 Eighth Ave., Terre Haute, 47804
Helen Cottrell, R.N., Adm.

Ewing Nursing Home (C)
504 S. 15th St., Terre Haute 47807
Mary Cox Ewing, R.N., Adm.

Meadows Manor (C)
3300 Poplar St., Terre Haute 47803
Wilma P. Hall, Adm.

Meadows Manor North, Inc. (C)
3150 N. 7th St., Terre Haute 47804
Marjorie Loving, R.N., Adm.

Terre Haute Nursing Home (C)
830 S. 6th St., Terre Haute 47808
Helen Kiefner, Adm.

Vigo County Home (C)
3500 Maple Ave., Terre Haute 47804
Margaret Koile, Adm.

Wallace Nursing Center, Inc. (C)
120 W. Margaret Ave., Terre Haute 47802
Richard D. Wallace, Adm.

Webster's Rest Home (C)
513-15 North 14th St., Terre Haute 47807
Rachel Webster, Adm.

WABASH COUNTY

The Estelle Peabody Memorial Home Inc. (R&C)
Seventh and Buffalo,
North Manchester 46962
Wayne A. Badskey, Adm.

Miller's Merry Manor, Inc. (C)
1035 Manchester Ave., Wabash 46992
Ellen McAllister, Adm.

Pleasant View Nursing Home (C)
R.R. 2, Wabash 46992
Rev. George L. Florence, Adm.

Shangri-La Manor, Inc. (R&C)
604 Rennaker St., La Fontaine 46940
Larrie L. Falder, Adm.

Timbercrest (R&C)
East St., North Manchester 46962
Orville Sherman, Adm.

Vernon Manor Children's Home (C)
P.O. Box 258, Wabash 46992
John W. Bishop, Adm.

Wabash Healthcare Center (C)
600 Washington St., Wabash 46992
David Woods, Adm.

WARREN COUNTY

Meadow Heights Nursing Center, Inc. (C)
200 Short St., Williamsport 47993
Mr. Terry Johnson, Adm.

WARRICK COUNTY

Baker's Rest Haven, Inc. (C)
305 E. North St., Boonville 47601
Viola Vance, R.N., Adm.

Medco Center of Chandler (C)
R.R. 2, Chandler 47610
Jerry Powers, Adm.

Medco Ctr. of Newburgh (R&C)
4255 Medwel Dr., Newburgh 47630
Arthur A. Hodde, Adm.

Monticello Manor (C)
S.E. Second St., Boonville 47601
Melvin H. White, Adm.

Newburgh Health Care & Residential Ctr. (C)
10466 Pollack Ave., Newburgh 47630
Bruce Baker, Adm.

WASHINGTON COUNTY

Williams Convalescent Center, Inc. (C)
Homer and Anson Sts., Salem 47167
Wayne H. Williams, and Kathleen Williams, L.P.N., Adms.

WAYNE COUNTY

Colonial Crest Convalescent Center Richmond (C)
1042 Oak Dr., Richmond 47374
Paul Rhodes, Adm.

Friends Fellowship Community, Inc. (R&C)
2030 Chester Blvd., Richmond 47374
Merrill W. Baxter, Adm.

Golden Rule Nursing Center, Inc. (C)
2001 U.S. 27 South, Richmond 47374
Al Knobler, Adm.

Heritage House of Richmond, Inc. (C)
2070 Chester Blvd., Richmond 47374
James Carter, Adm.

Jenkins Hall (R&C)
N. 10th St., Richmond 47374
Roger Bucher, Adm.

Owens Nursing Home Inc. (C)
1811 S. Ninth St., Richmond 47374
Terry Owens, Adm.

Pinehurst Nursing Home (C)
Box 145, Centerville 47330
Mary McClure, R.N., Adm.

Richmond Nursing Home (C)
2302 N. Chester Blvd., Richmond 47374
Margo White, Adm.

WELLS COUNTY

Cooper Rest Homes, Inc. (C)
1509 Fort Wayne Rd., Bluffton 46714
Daniel J. Cooper, Adm.

Davis Bluffton Nursing Home (C)
1001 S. Clark Ave., Bluffton 46714
I. Helen Jackson, Adm.

Meadowvale Skilled Care Center (C)
1529 W. Lancaster St., Bluffton 46714
David A. Davis, Adm.

WHITE COUNTY

Archibald Memorial Home for Aged Deaf (R)
R.R. 2, Brookston 47923
Leona Turner, Adm.

Lake View Home (R)
800 W. Norway Rd., Monticello 47960
Ora Rumple, Adm.

Monticello Community Healthcare Ctr. (C)
R.R. 6, Monticello 47960
Jeffrey L. Bulkey, Adm.

WHITLEY COUNTY

Alfran Nursing Home, Inc. (C)
R.R. 9, Columbia City 46725
Elson Wilson, L.P.N., Adm.

Columbia City Nursing Home (C)
522 N. Line St., Columbia City 46725
Jeanette Ellis, Adm.

Mary Farris Nursing Home (C)
215 E. VanBuren, Columbia City 46725
Mary Farris, Adm.

Miller's Merry Manor, Inc. (R&C)
710 W. Ellsworth St., Columbia City 46725
Grace M. Karst, R.N., Adm.

Indiana University School of Medicine

1100 W. Michigan Street, Indianapolis 46223
Steven C. Beering, M.D., Indianapolis, Dean

HEADS OF DEPARTMENTS

Department of Anatomy—Charles E. Blevins, Ph.D., Chairman, Indianapolis.
Department of Physiology—Ewald E. Selkurt, Ph.D., Indianapolis, Chairman.
Department of Biochemistry—David M. Gibson, M.D., Indianapolis, Chairman.
Department of Health Administration—Samuel H. Hopper, Ph.D., Chairman of the Executive Committee.
Department of Pathology—Carleton Nordschow, M.D., Chairman, Indianapolis.
Department of Microbiology and Immunology—William D. Sawyer, M.D., Indianapolis, Chairman.
Department of Orthopedic Surgery—Donald B. Kettelkamp, M.D., Chairman, Indianapolis.
Department of Surgery—John E. Jesseph, M.D., Indianapolis, Chairman.
Department of Medicine—Walter J. Daly, M.D., Chairman, Indianapolis.
Department of Neurology—Mark Dyken, M.D., Chairman, Indianapolis.
Department of Psychiatry—Hugh C. Hendrie, M.D., Chairman, Indianapolis.
Department of Radiology—Eugene C. Klatte, M.D., Indianapolis, Chairman.
Department of Radiation Oncology—Ned Hornback, M.D., Chairman, Indianapolis.
Department of Obstetrics and Gynecology—Charles A. Hunter, Jr., M.D., Indianapolis, Chairman.
Department of Otorhinolaryngology and Bronchoesophagology—Raleigh Lingeman, M.D., Chairman, Indianapolis.
Department of Ophthalmology—Fred M. Wilson, M.D., Indianapolis, Chairman.
Department of Urology—John Donohue, M.D., Chairman, Indianapolis.
Department of Family Medicine—A. Alan Fischer, M.D., Chairman, Indianapolis.
Department of Pharmacology—Henry R. Besch, Ph.D., Indianapolis, Chairman.
Department of Pediatrics—Morris Green, M.D., Indianapolis, Chairman.
Department of Anesthesiology—Robert Stoelting, M.D., Indianapolis, Chairman.
Department of Dermatology—Arthur L. Norins, M.D., Indianapolis, Chairman.
Department of Medical Genetics—Joe C. Christian, M.D., Indianapolis, Chairman.

INDIANA UNIVERSITY MEDICAL CENTER

1100 W. Michigan Street
Indianapolis

Director of Hospitals—Roger S. Hunt
Director of Clinical Laboratories—Carleton Nordschow, M.D.
Chief Radiologist—Eugene C. Klatte, M.D.

List of Indiana Accredited Programs In Nursing Preparing for Licensure As Registered Nurses

INDIANA STATE BOARD OF NURSES' REGISTRATION AND NURSING EDUCATION

700 High School Road, Indianapolis 46224

April 1979

HOSPITAL PROGRAMS

Name of School of Nursing	Location	Director	Zip Code
Deaconess Hospital	Evansville	Miss Ellen Lynch, R.N.	47747
Lutheran Hospital	Fort Wayne	Ms. Delores Brown	46807
Parkview-Methodist	Fort Wayne	Miss Dorothy Craig, R.N.	46805
St. Joseph Hospital	Fort Wayne	Ms. Mary Ruth Beeber	46804
Wishard Memorial Hospital	Indianapolis	Ms. Shirley Ross, R.N., Acting	46202
St. Elizabeth Hospital	Lafayette	Sister M. Florianne, R.N.	47904
Memorial Hospital	South Bend	Miss Irene M. Kardasen, R.N.	46601

BACCALAUREATE DEGREE PROGRAMS

Name of School of Nursing	Location	Director, Dean or Head of Department	Zip Code
Univ. of Evansville	Evansville	Dr. Lois Merrill, R.N., Dean	47702
Goshen College Div. of Nursing	Goshen	Mrs. Marilyn Leichty, R.N., Interim Director	46526
DePauw University			
1812 N. Capitol	Indianapolis	Ms. Doris Froebe, R.N., Director	46202
Indiana University (IUPUI)			
1100 W. Michigan St.	Indianapolis	Mrs. Elizabeth Grossman, R.N., Dean	46202
Marion College Dept. of Nursing	Marion	Dr. Wilma Jean Jackson Morton	46952
Ball State University			
Dept. of Nursing	Muncie	Dr. Martha Morris, Head	47306
Saint Mary's College Dept. of Nursing	Notre Dame	Dr. Mary Elizabeth Martucci, R.N., Chairman	46556
Indiana State University	Terre Haute	Dr. Mary Anne E. Roehm, R.N., Interim Dean	47809
Valparaiso University			
College of Nursing	Valparaiso	Dr. Dorothy Paulsen Smith, R.N., Dean	46383

ASSOCIATE DEGREE PROGRAMS

Name of School or Department	Location	Director or Head of Department	Zip Code
Anderson College Dept. of Nursing	Anderson	Miss Louise Spall, R.N., Chairperson	46011
University of Evansville ADN Program	Evansville	Mrs. Nadine Coudret, R.N.	47702
Indiana University ADN Programs:			
I.U. Northwest, 3400 Broadway	Gary	Dr. Doris R. Blaney, R.N.	46408
I.U.P.U.I., 1100 W. Michigan St.	Indianapolis	Miss Margaret Applegate, R.N.	46202
I.U. Southeast, Div. of Nursing			
4201 Grant Line Road			
P.O. Box 679	New Albany	Dr. Louise F. Suleiman, R.N.	47150
I.U. Kokomo, 2300 S. Washington	Kokomo	Mrs. Florence Gardner, R.N.	46901
Indiana Central College Dept. of N.	Indianapolis	Mrs. LeAlice Briggs, R.N.	46227
Marian College	Indianapolis	Miss Mary Ann Lewis, R.N.	46222
Purdue University Nursing Sections:			
Ft. Wayne Campus,			
2101 Coliseum Blvd.	Ft. Wayne	Mrs. Elaine Cowen, R.N., Chairman	46805
Calumet Campus, 2233-171st Street	Hammond	Mrs. Joyce A. Ellis, R.N., Chairman	46323
Lafayette Campus,			
S. Campus Courts	West Lafayette	Miss Mary Helen Zink, R.N., Chairman	47907
North Central Campus	Westville	Ms. Iva Brunner, R.N., Chairman	46391
Vincennes University	Vincennes	Miss Stella Risch, R.N., Chairperson	47591
Grace College	Winona Lake	Mrs. Barbara Woodring	46950

Indiana Accredited Programs in Practical Nursing*

April 1979

School or Program		Director, School or Program
Anderson School of Practical Nursing Anderson Community Schools 325 W. 38th St., Anderson	46014	Mrs. Virginia Blakeley, R.N., Director
Indiana Vocational Technical College Schools of Practical Nursing Region 10, 725 W. 2nd St., Bloomington	47401	Mrs. Lois Ahlhauser, R.N.
Region 10, 2518 E. 17th St., Columbus	47201	Mrs. Margaret Watson, R.N.
Region 4, 616 Wabash Ave., Lafayette	47905	Mrs. Donna Halles, Acting
Region 1, Purdue University, N.C., Westville	46391	Miss Virginia Melevage, R.N.
Region 9, Reid Memorial Hosp. 1401 Chester Blvd., Richmond	47374	Mrs. Joan Esarey, R.N.
Region 2, 1534 W. Sample St., S. Bend	46619	Miss Dorothy Bupp, R.N., Dept. Chairman
Region 7, R. R. #22, Box 450, T. Haute	47802	Mrs. Betty Fowler, R.N., Chairman Life Sciences
Evansville School of Practical Nursing Evansville-Vanderburgh School Corp., 1900 Stringtown Road, Evansville	47711	Miss Joyce Stevens, R.N., Coordinator
School of Practical Nursing Fort Wayne Community Schools, 1200 South Barr, Fort Wayne	46802	George F. Walls, R.N., Coordinator Health Occupations
I.U.T.C., Region 8 26 N. Arsenal Ave., Indianapolis	46201	Miss Verna Coons, R.N., Director
Metropolitan School District of Washington Twp. J. Everett Light Career Center 1901 E. 86th St., Indianapolis	46240	Mrs. Madlon Drayer, R.N., Director
Kokomo School of Practical Nursing Kokomo-Center Twp. Cons. Sch. Corp., 1104 N. Bell, Kokomo	46901	Mrs. Geraldine Huber, R.N., Director-Coordinator
Marion Community School of Practical Nursing Tucker Area Career Center 750 W. 26th St., Marion	46952	Mrs. Esther Fritts, R.N., Instructor-Supervisor
Muncie School of Practical Nursing Ball Memorial Hospital 2300 West Gilbert Street, Muncie	47303	Mrs. Anita Haney, R.N., Interim Director
New Albany School of Practical Nursing New Albany-Floyd Co. Cons. Sch. Corp. 4202 Charlestown Rd., New Albany	47150	Mrs. Phyllis Thacker, R.N., Director-Instructor
Vincennes University Practical Nurse Program, Vincennes	47591	Ms. Karen Gines, R.N., Director

* Furnished by INDIANA STATE BOARD OF NURSES' REGISTRATION AND NURSING EDUCATION, 700 High School Road, Indianapolis, Indiana 46224

Ivy Tech Health Occupation Courses

The Indiana Vocational Technical College, 5221 Ivy Tech Drive, Indianapolis 46206, telephone 317-297-3210, offers the following health occupation courses at the locations listed:

BLOOMINGTON

619 West First St.
Bloomington 47401
Offers courses to prepare:
Practical Nursing
Medical Laboratory Assistant

COLUMBUS

646 Franklin St.
Columbus 47201
Offers courses to prepare:
Practical Nursing
Medical Assistant
Respiratory Therapy

EVANSVILLE

3501 First Avenue, Box 3199
Evansville 47710
Offers courses to prepare:
Medical Assistant

FORT WAYNE

3800 N. Anthony Blvd.
Fort Wayne 46805
Offers courses to prepare:
Medical Assistant
Respiratory Therapy
Emergency Medical Technician-Ambulance
and certificates in
Dietary Assistant
Nurses' Aide/Home Health Care

GARY

1440 East 35th Ave.
Gary 46409
Offers courses to prepare:
Emergency Care Technicial—Level II
Medical Assistant
Operating Room Technician
Practical Nursing
Respiratory Therapy Technician
Dietetic Assistant
Emergency Medical Technician—Ambulance
Nurse Aide/Orderly

INDIANAPOLIS

1315 East Washington St.
Indianapolis 46202
Offers courses to prepare:
Medical Laboratory Technician
Medical Assistant
Operating Room Technician
Radiologic Technology
Respiratory Therapy Technician
Emergency Medical Technician—Ambulance
Nurse Aide/Orderly
Practical Nursing

KOKOMO

1815 East Morgan Street
Kokomo 46901
Offers courses to prepare:
Medical Assistant
Emergency Medical Technician—Ambulance

LAFAYETTE

616 Wabash Ave.
Lafayette 47905
Offers courses to prepare:
Medical Laboratory Technician
Dental Assistant
Medical Assistant
Operating Room Technician
Practical Nursing
Respiratory Therapy Technician
Emergency Medical Technician—Ambulance

MADISON

1st and Broadway
Madison 47250
Offers courses to prepare:
Medical Assistant
Nurse Aide/Orderly

MUNCIE

4100 Cowan Road, Box 3100
Muncie 47302
Offers courses to prepare:
Medical Assistant
Emergency Medical Technician—Ambulance
Nurse Aide/Orderly

RICHMOND

2325 Chester Blvd., Box 1145
Richmond 47374
Medical Laboratory Technician
Practical Nursing
Nurse Aide/Orderly

SELLERSBURG

8204 Highway 31-W
Sellersburg 47172
Medical Assistant
Operating Room Technician
Emergency Medical Technician—Ambulance
Nurse Aide/Orderly

SOUTH BEND

1534 West Sample St.
South Bend 46619
Medical Assistant
Operating Room Technician
Practical Nursing
Medical Laboratory Technician
Dietetic Assistant
Emergency Medical Technician—Ambulance
Respiratory Therapy

TERRE HAUTE

R.R. 22, Box 760
Terre Haute 47802
Medical Assistant
Practical Nursing
Medical Laboratory Assistant
Radiologic Technology

Official Yellow Fever Vaccination Centers

Although other immunizations for foreign travel (e.g., cholera, smallpox) may be given in any physician's office or clinic, yellow fever immunization is available only at the following Yellow Fever Vaccination Centers officially designated by the Indiana State Board of Health. All clinic hours are by appointment (call Center) and a fee is charged for the immunization.

Elkhart County Health Department, 315 S. Second St., Elkhart, Phone: 219-294-1688, Extension 205.

Evansville-Vanderburgh County Health Department, Room 127, City-County Administration Building, Evansville, Phone: 812-426-5691.

Fort Wayne-Allen County Board of Health, One E. Main St., Fort Wayne, Phone: 219-423-7504 or (7505).

Gary Health Department, 1145 W. Fifth Ave., Gary, Phone: 219-944-6686.

Indiana University Medical Center, Long and Clinical Building, 1100 W. Michigan St., Indianapolis, Phone: 317-264-7800 (or 7809).

Lake County Health Department, 2293 N. Main St., Crown Point, Phone: 219-738-2020, Ext. 311.

St. Joseph County Health Department, Ninth Floor, County-City Building, South Bend, Phone: 219-284-9783 or (9781).

Vigo County Health Department, 120 S. Seventh St., Terre Haute, Phone: 812-238-8429.

The following are out-of-state Yellow Fever Vaccination Centers that Indiana residents may wish to utilize. Call Center for appointment.

Louisville-Jefferson County Health Department, 400 East Gray, Louisville, Ky., Phone: 502-587-3788.

Cincinnati City Health Department, 3101 Burnet Avenue, Cincinnati, Phone: 513-352-3147.

Montgomery County Health Department, 451 West Third Street, Dayton, Phone: 513-225-4500.

Miami University Student Health Services, MacMillan Hospital, Oxford, Ohio, Phone: 513-529-3333.

DISEASE PREVENTION by Immunization and Chemoprophylaxis*

Disease	Agent Used	Recommended For	Method of Administration	Type of Immunity	Duration of Protection	Booster Injection
Cholera	Cholera Vaccine	Travelers vaccinated in the United States require only one dose of cholera vaccine (dose number one in table at right) and should receive the second dose only if they will be traveling or working in areas where cholera is epidemic or endemic and sanitation is less than adequate.	Dose Number / Age (years) Under 5 / 5-10 / Over 10: 1 — 0.1 ml / 0.3 ml / 0.5 ml; 2 — 0.3 ml / 0.5 ml / 1.0 ml	Active	6 months	Should be given every six months as long as likelihood of exposure exists. Same volume as dose number two of primary series.
Diphtheria	Diphtheria Antitoxin	All early cases	Intravenous preferred. Warning: Test for sensitivity to horse serum. Dosage dependent on degree of toxicity rather than age and weight. 20,000 units to 120,000 units.	Passive	Short	Additional antitoxin given dependent upon illness and toxicity.
Diphtheria	Diphtheria toxoid (alum precipitated or aluminum phosphate absorbed, for adult use, 2 Lf of antigen).	Children and adults. Use only when there are definite contraindications to other components of combined antigen (DPT or Td).	Two intramuscular injections of 0.5 cc. each, four to six weeks apart and third dose one year later.	Active	Indefinite	0.5 cc. every 10 years.
Diphtheria	Diphtheria-Pertussis-Tetanus alum precipitated or aluminum hydroxide (or aluminum phosphate) absorbed diphtheria and tetanus toxoids; containing 12 protective antigenic units of vaccine per 1.5 cc. (DPT)	Children two months through six years.	Three intramuscular injections of 0.5 cc each, one month apart followed by reinforcing dose one year after third dose. Series should begin at 6 weeks to 3 months of age.	Active	Indefinite	D-P-T booster of 0.5 cc. at 3-6 years. (Preferably at time of school entrance—kindergarten or elementary school.)
Diphtheria	Tetanus and Diphtheria Toxoids, adult type (Td-containing 2 Lf of diphtheria toxoid).	Children and adults (Diphtheria-Pertussis-Tetanus combination is preferred for children under 6 years of age, except when pertussis component contraindicated.)	Primary immunization: (1) First dose of 0.5 cc. IM or subcu (2) Second dose of 0.5 cc. IM or subcu 4-6 weeks later. (3) Reinforcing dose one year after (2)	Active	Indefinite	Diphtheria Tetanus (Td) booster every 10 years.
Hepatitis, Infectious (Type A)	Immune Serum Globulin (ISG or Gamma Globulin)	All exposed in household, institution, etc.	Dosage: 0.02 ml/kg body weight intramuscularly.	Passive	Brief	Repeat each exposure

Hepatitis, Serum (Type B)	Hepatitis B Immune Globulin (HBIG); Immune Serum Globulin (ISG)	Needle-stick or mucosal exposure to known HBsAg-positive blood.	HBIG 0.05-0.07 ml/kg body wt. within 7 days after exposure; repeat dose in 25-30 days. (ISG, same dosage schedule, if HBIG unavailable.)	Passive	Brief	Repeat for each exposure or according to schedules given under Method of Administration.
		Infants of mothers having acute hepatitis B in 3rd trimester of pregnancy and HBsAg-positive at delivery.	Within 7 days of birth, single dose HBIG 0.13 ml/kg body wt. or ISG 0.5 ml/kg body wt.			
		Anti-HBs-negative staff and patients of hemodialysis units, only if routine serologic screening and hygienic measures fail to prevent transmission.	ISG 0.05-0.07 ml/kg body wt. at 4-month intervals.			
		Anti-HBs-negative patients and staff of institutions for mentally retarded, during periods of demonstrated hepatitis B transmission.	ISG 0.05-0.07 ml/kg body wt. at 4-month intervals.			
Influenza	Polyvalent Vaccine (Subject to annual changes in recommendations late summer or fall)	Persons with chronic debilitating disease of heart and lungs and those with chronic metabolic disorders, especially diabetes mellitus. Consider for all older age persons, especially those with incipient or potentially chronic heart or lung disease.	One dose subcutaneously. (Two doses may be recommended for children; consult package insert with current year's vaccine.)	Active	60-90% effective, at least one year.	One dose annually
Measles	Live, "Further Attenuated" Vaccine	15 months and older	Single dose subcutaneously	Active	At least 15 years. May be lifelong	Reimmunize children previously immunized at less than 12 months of age; also, those who received only inactivated vaccine or a combined series of inactivated and live vaccines.
Mumps	Mumps Virus Vaccine, Live, Attenuated	Children 12 months or older Adults who have not had mumps	One dose subcutaneously	Active	Eight years known—probably much longer	Not known at present

Disease	Agent Used	Recommended For	Method of Administration	Type of Immunity	Duration of Protection	Booster Injection
Meningococcic Meningitis	Rifampin	Intimate contacts of a case	Adults: 600 mg. orally twice daily for two days. Children: 10 mg/kg twice a day for two days for children age 1 to 12 years; 5 mg/kg twice daily for two days for infants age 3 months to 1 year.	None Chemical prophylaxis only	Very brief—for one exposure only.	Repeat following each exposure.
	Minocycline	Same	Adults: 100-200 mg. orally every 12 hours for five days (caution: vestibular reactions reported)			
	Sulfadiazine	Same: use only for proven sulfa-sensitive meningococcus	Twelve years of age or older: 1.0 gm twice daily for 2 days. Under 12 years of age: 0.5 gm twice daily for 2 days.			
	Meningococcal polysaccharide vaccines, monovalent group C, and bivalent A-C.	Routine use not recommended. Selective use for: control of outbreaks due to N. meningitidis serogroups A or C; some travelers to countries having epidemic meningococcal disease: adjunct to chemoprophylaxis for household contact of meningococcal disease cases.	One dose parenterally, volume specified by manufacturer.	Active. Children less than two years old respond less well to the Group A antigen than do older persons; the Group C antigen is not effective in children less than two years of age.	Unknown	Insufficient data.
Pertussis	Pertussis Vaccine saline suspended (See Double and Triple antigens under "Diphtheria")	Children during epidemic	A total of 12 N. I. H. units divided into 3 equal doses of 4 N. I. H. units (0.5 cc.) given subcutaneously at intervals of one week.	Active	Indefinite	1 year after primary series, 2 years after primary series and then every three years to 6 or 7 years of age.
Pertussis	Pertussis Vaccine alum precipitated or aluminum hydroxide adsorbed (See Double and Triple antigens under "Diphtheria")	Routine immunization of infants when DPT is contraindicated	A total of 12 N. I. H. units divided into 3 equal doses of 4 N. I. H. units each (0.5 cc.) injected intramuscularly at intervals of 4 to 6 weeks.	Active	Indefinite	18 months—3-4 years. 6-7 years usually given as DPT.
		Exposure Recall		Active	Indefinite	4 NIH units (0.5 cc.) saline suspension subcutaneously if child has not had immunization past 2 years.
Plague	Plague Vaccine—a suspension of Yersinia pestis.	Epidemics and areas with high endemic rate.	Age (years) Dose No. / Under 1 year / 1-4 / 5-10 / Over 10 1: 0.1 ml / 0.2 ml / 0.3 ml / 0.5 ml 2: 0.1 ml / 0.2 ml / 0.3 ml / 0.5 ml 3: 0.04 ml / 0.08 ml / 0.12 ml / 0.2 ml	Active	Partial protection for period of 4-6 mos.	Every 6-12 months as long as risk of exposure persists. Same volume as third dose of primary series.

Pneumococcal Pneumonia	Pneumococcal Vaccine, Polyvalent (14 capsular types accounting for 80% of disease.)	Persons over 2 years old who have 1) splenic dysfunction (e.g., sickle cell disease) or asplenia, or 2) diabetes mellitus or functional impairment of cardio-respiratory, hepatic, or renal systems; may also consider for special closed population groups, e.g., residential schools, nursing homes.	Single subcutaneous or intramuscular dose of 0.5 ml.	Active	Unknown; antibody titers are likely to remain high for several years.	At no less than 3-year intervals.
Poliomyelitis	Poliovirus Vaccine, Live, Trivalent, Oral (Sabin)	Infants	First dose age 6-12 weeks, 2nd dose 8 weeks later, 3rd dose 8-12 months after 2nd.	Active	Thought to be permanent	Children should receive one booster dose on entering school; thereafter, may be needed for foreign travel.
		Children	Two doses 6-8 weeks apart; third dose 8-12 months after second.			
		Adults, age 18 years or older.	Not necessary in U.S. but if at risk may be immunized as are children. Inactivated poliomyelitis vaccine may be preferred.			
	Poliomyelitis Vaccine (Inactivated) (Salk)	All ages	Three parenteral doses at 1- to 2-month intervals, followed by fourth dose 6-12 months after the third.	Active	Not known (Salk has demonstrated adequate antibodies present after 8 years.)	Every 2-3 years. Need for boosters obviated by full course of Trivalent Oral Polio Vaccine.
Rabies (post exposure prophylaxis)	Rabies hyperimmune serum: a) Rabies immune globulin (human) b) Antirabies serum (equine). Rabies vaccine-duck embryo (DEV).	Bites by animals with known or suspected rabies; also, non bite exposures involving contamination of scratches, abrasions, open wounds or mucous membranes with saliva from such animals.	Hyperimmune serum, one dose as soon as possible after exposure. Begin 21-dose rabies vaccine series simultaneously; this may be given as 21 daily doses or two doses daily for seven days followed by one dose daily for seven days.	Passive immunity from hyperimmune serum. Active immunity from DEV.	Serum—few weeks. Vaccine—indefinite.	Vaccine booster tenth and twentieth day after last dose of DEV series. Collect serum for rabies antibody testing at time of second booster.
Rabies (pre-exposure prophylaxis)	Rabies vaccine-duck embryo (DEV).	High-risk groups, e.g., veterinarians, animal handlers, certain laboratory workers, spelunkers, etc.	Two doses DEV one month apart followed by third dose in six-seven months (80%-90% response); or, three doses DEV at weekly intervals and fourth dose three months later (80% response).	Active. Test serum for rabies antibodies three-four weeks after last dose; if negative, give booster doses until response indicated.	Two years.	Routine: vaccine booster every two years. Exposure by rabid animal: Five daily doses of DEV followed by booster dose 20 days after fifth dose.

Disease	Agent Used	Recommended For	Method of Administration	Type of Immunity	Duration of Protection	Booster Injection
Rubella	Live virus vaccine	All children ages 1-12 yrs.; also susceptible nonpregnant females of childbearing age who will prevent pregnancy for three months after vaccination.	1 dose subcutaneously	Active	At least 5 yrs—Long term protection likely	Not known at present
Smallpox	Smallpox Vaccine (Vaccinia virus)	Travelers to countries still requiring vaccination for entry.	Multiple pressure, jet injection, or other techniques shown to be equally effective in assuring takes.	Active	3-10 years	Foreign travel—every 3 years.
Tetanus	Tetanus Immune Globulin (Human) (TIG)	Unimmunized persons, especially those with crushing injuries, burns, or penetrating wounds; also, for persons seen more than 24 hours after tetanus-prone injury who have had no tetanus toxoid for many years.	Adults: 250 units IM for wounds of average severity, up to 500 units for very severe wounds; children: 4 units per kilogram body weight.	Passive	21 days	Must repeat with each injury. Immunization with tetanus toxoid obviates need for further TIG.
	Tetanus Antitoxin Use only if Tetanus Immune Globulin (Human) is unavailable.	All cases of puncture wounds and animal bites when person has not been immunized for more than 5 years since last booster.	Caution: Skin test first for serum sensitivity. intramuscular injection of 3,000-10,000 units anti-toxin.	Passive	10 days	Repeat with each injury. Because of hazard to horse serum active immunization with toxoid preferred.
	Tetanus Toxoid, depot (alum precipitated or absorbed) (See Double and Triple antigens under "Diphtheria")	Hypersensitivity to other components of DTP and Td.	Two doses, each 0.5 cc. given intramuscularly, not less than four weeks apart followed by a reinforcing injection 8-12 months later.	Active	Extremely long lasting	Every 10 years

Typhoid Fever	Typhoid Vaccine	Exposure to a carrier in a household; outbreaks of typhoid fever in a community; travel to areas where typhoid fever is endemic.	Adults and children over 10 years old: 0.5 ml subcutaneously on two occasions, separated by 4 or more weeks. Children less than 10 years old: 0.25 ml subcutaneously on two occasions, separated by 4 or more weeks. If more rapid immunization is required, 3 doses of the same volume listed above may be given at weekly intervals but this schedule may be less effective.	Active	Indefinite—at least 3 yrs.	Every one to three years under conditions of continued or repeated exposure. Adults and children over 10 years old: 0.5 ml subcutaneously or 0.1 ml intradermally. Children 6 mo. to 10 yrs: 0.25 ml subcutaneously or 0.1 ml intradermally
Typhus Fever	Typhus Fever Vaccine	Not required for travelers to any part of the world. Suggested for persons living or working in close contact with certain indigenous populations in remote areas of South America, Africa and Asia.	Adults Two doses, each 0.5 cc. at intervals of 4 or more weeks given subcutaneously. Allergy to egg or chicken protein only contraindication. Children under 10 years: one half of adult dose.	Active	Relative 6-12 months	Every 6-12 months as long as opportunity for exposure exists. Same dose as in initial series.
Yellow Fever	Yellow Fever Vaccine* (Obtainable only at U. S. P. H. S. Hospital or Yellow Fever Immunization Depots. See footnote where obtainable in Indiana.)	All persons traveling in or through or living in endemic areas. Should receive vaccine 10 days before arrival in area.	One dose 0.5 cc. of a 1:10 dilution of concentrated vaccine, freshly prepared. Given subcutaneously. Should not be given to person ill with virus disease.	Active	10 years	Every 10 years repeat immunization.

* While many contraindications are listed for various biologicals, it should be recognized that in the interest of brevity it was impossible to give all details. In case of doubt consult standard reference for detailed description of biological in question and/or pharmaceutical company's circular accompanying original package of biological.

All of the biologicals listed may be obtained through normal supply channels with the exception of YELLOW FEVER VACCINE. Because of hazards if yellow fever vaccine is improperly handled, it can only be obtained from official yellow fever vaccination centers (See next page.)

Interruption Of Recommended Pediatric Immunization Schedule

Interruption of the recommended schedule, with a delay between doses, does not interfere with the final immunity achieved; nor does it necessitate starting the series over again, regardless of the length of time elapsed.

Area Poison Information Centers in Indiana

and Adjacent States

*ATTENTION: Physicians, Hospitals and Poison Information Centers.

Since July 1, 1965, Wishard Memorial Hospital, Indianapolis, has been the principal INFORMATION CENTER for the state of Indiana, replacing that service provided by the Indiana State Board of Health. If you need help in determining the toxic ingredients in a "trade name product" or have a problem involving treatment of a poisoning case, please call WISHARD MEMORIAL (Marion County General) HOSPITAL, INDIANAPOLIS — 630-7351. Toll free number for outside Indianapolis Dialing Area — 800-382-9097.

City	Name and Address	Telephone	Director
Anderson	St. John's Hickey Memorial Hospital 2015 Jackson Street	317-846-8251 Ext. 251	Thomas Schrader, R.Ph.
Anderson	Community Hospital 1515 N. Madison Ave.	317-646-5198	Judy Eppinga, R.N.
Angola	Cameron Memorial Hospital, Inc. 416 E. Maumee	219-665-2141 Ext. 146	Ellen Sanborn, R.N.
Columbus	Bartholomew Co. Hospital 2400 E. 17th St.	219-376-5277	Herman J. Echsner, M.D. Judy Maupin, R.N.
Crown Point	St. Anthony Medical Center Main at Franciscan Road	219-738-2100	Mrs. Margaret Mason, R.N.
East Chicago	St. Catherine Hospital 4321 Fir Street	219-392-7203 219-392-1700	Harvey Levin, M.D.
Elkhart	Elkhart General Hospital 600 East Boulevard	219-294-2621	C. Richard Yoder, M.D.
Evansville	Deaconess Hospital 600 Mary Street	812-426-3405	David A. Johnson, Hosp. Adm.
Evansville	St. Mary's Hospital, Inc. 3700 Washington Avenue	812-477-6261	Samuel Fitzsimmons, M.D.
Evansville	Welborn Memorial Baptist Hospital, Inc. 401 S. E. Sixth Street	812-426-8000	Barbara Splittorff, R.N.
Fort Wayne	The Lutheran Hospital 3024 Fairfield Avenue	219-458-2211	Lloyd A. Vogel, M.D.
Fort Wayne	Parkview Memorial Hospital 220 Randalia Drive	219-484-6636 Ext. 7800	William O. Wissman, Pharm. Grace Kammeyer, R.N.
Fort Wayne	St. Joseph Hospital 700 Broadway	219-423-2614	Nancy Sharp, R.N. Delores Bash, R.N.
Frankfort	Clinton County Hospital 1300 S. Jackson Street	317-654-4451	William J. Russell, Hosp. Adm.
Gary	Methodist Hospital of Gary, Inc. 600 Grant St.	219-886-4710	Bessie Garrett, R.N., Dir. Emergency Service
Goshen	Goshen General Hospital 200 High Park Avenue	219-533-2141 Ext. 462	Craddock Duren, M.D.
Hammond	St. Margaret Hospital 25 Douglas Street	219-932-2300 Ext. 700	Karen Norman, R.N.
Huntington	Huntington Memorial Hospital 1215 Etna Avenue	219-356-3000	Terry L. Messler, R. Ph.
*Indianapolis	Wishard Memorial Hospital 1001 West 10th Street	317-630-7351	Carolyn Cunningham, M.D.

(Toll free number for outside Indianapolis dialing area — 800-382-9097)

Area Poison Information Centers in Indiana

City	Name and Address	Telephone	Director
Indianapolis	Methodist Hospital of Indiana, Inc. 1604 North Capitol Ave.	317-924-8355	Maxine Bush, R.N.
Kendallville	McCray Memorial Hospital Hospital Drive	219-347-1100	Ms. Marcia Bruce, R.N.
Kokomo	Howard Community Hospital 3500 S. Lafountain St.	317-453-8444	Kay Titus, R.N.
Lafayette	St. Elizabeth Hospital 1501 Hartford Street	317-423-6271	Lois Thoennes, Dir. E. R. Barbara Oldfield, R.N.
	Lafayette Home Hospital, Inc. 2400 South St.	317-447-6811	Jayne Binz, R.Ph., M.Sc.
LaGrange	LaGrange County Hospital R.R. #1	219-463-2144	Allen S. Martin, M.D.
LaPorte	LaPorte Hospital, Inc. 1007 Lincolnway	219-362-7541 Ext. 212	Mrs. Veronica Doig, R.N. Charles Muhleman, M.D. Robert M. Kelsey, M.D.
Lebanon	Witham Memorial Hospital 1124 N. Lebanon Street	317-482-2700 Ext. 44	Thomas Dillon, D.O.
Madison	The King's Daughters' Hospital 112 Presbyterian Ave.,	812-265-5211 Ext. 14	Ester Pocovello, R.N.
Marion	Marion General Hospital Wabash and Euclid Avenue	317-662-4694	Joseph W. Green, Hosp. Adm.
Mishawaka	St. Joseph Hospital 215 West 4th Street	219-259-2431	Richard Ganser, M.D.
Muncie	Ball Memorial Hospital 2401 University Avenue	317-747-3241	Joyce Hartley, R.N.
Portland	Jay County Memorial Hospital 505 West Arch Street	317-726-7131 Ext. 159	George Donnelly, M.D. William Devlin, R. Ph.
Richmond	Reid Memorial Hospital 1401 Chester Blvd.	317-692-7010 Ext. 622	B. D. Wagoner, M.D.
Shelbyville	William S. Major Hospital 150 W. Washington Street	317-392-3211 Ext. 52	Mrs. Hardin, R.N.
South Bend	St. Joseph Hospital 811 East Madison Street	219-234-2151 Ext. 264, 253	Logan Dunlap, M.D.
Terre Haute	Union Hospital, Inc. 1606 N. Seventh Street	812-238-7000 Ext. 7523	Darrell Propst, R. Ph. Kay Jones, R.N.
Valparaiso	Porter Memorial Hospital 814 LaPorte Avenue	219-464-8611 Ext. 232, 312, or 334	Mrs. Joy Punter, R.N.
Vincennes	The Good Samaritan Hospital 410 S. Seventh Street	812-885-3348	Donald M. Friedmann, R. Ph.
Indianapolis	**Poison Control Coordinator for Indiana Indiana State Board of Health Hazardous Products Section Division of Drug Control 1330 W. Michigan Street Indianapolis, IN 46206	317-633-0332	G. Carl Huber

Area Poison Information Centers in Indiana

ADJACENT STATES

	Illinois	
Chicago	Poison Control Center Rush-Presbyterian—St. Luke's Medical Center 1753 W. Congress Pkwy.	312-942-5969
	Kentucky	
Louisville	Poison Control Center Norton Children's Hospital Pharmacy Dept. 200 E. Chestnut St.	502-589-8222
	Missouri	
St. Louis	Poison Control Center Cardinal Glennon Memorial Hospital for Children 1465 S. Grand Blvd.	314-772-5200
St. Louis	Poison Control Center St. Louis Children's Hospital 500 S. Kingshighway	314-367-2034
	Ohio	
Cincinnati	Drug & Poison Information Center University of Cincinnati Medical Center Room 7701, Bridge	513-872-5111
Columbus	Poison Control Center Children's Hospital 17th St. at Livingston Park	614-258-9783 or 228-1323

**Available for information on the functions of all Area Poison Information and Treatment Centers

INDIANA STATE MEDICAL ASSOCIATION AUXILIARY

1979-1980

Officers			
PRESIDENT	Mrs. Abner P. Bennett	961 Blue Ridge Road	Evansville 47715
PRESIDENT-ELECT	Mrs. Herbert A. Schiller	1813 East Cedar St.	South Bend 46617
FIRST VICE-PRESIDENT	Mrs. Glenn W. Irwin Jr.	5801 Sunset Lane	Indianapolis 46208
NORTHERN AREA V.P.	Mrs. James Benson	1629 Rainbow Bend Blvd.	Elkhart 46514
CENTRAL AREA V.P.	Mrs. Robert E. Wrenn	2514 Deepwell Court	Bloomington 47401
SOUTHERN AREA V.P.	Mrs. James A. Koontz	2009 Jackson Dr.	Vincennes 47591
RECORDING SECRETARY	Mrs. Richard B. Schnute	752 Round Hill Road	Indianapolis 46460
TREASURER	Mrs. Robert M. Schleinkofer	4820 Midlothian Drive	Fort Wayne 46815
IMMEDIATE PAST PRESIDENT	Mrs. G. Beach Gattman	1319 Lawn Ave.	Elkhart 46514
Appointed Officers			
CORRESPONDING SECRETARY	Mrs. James A. Marvel	312 Royan Ave	Evansville 47715
FINANCE	Mrs. Philip L. Smith	5416 South Wayne Ave.	Fort Wayne 46807
HISTORIAN	Mrs. Stanley M. Chernish	4403 Radnor Rd.	Indianapolis 46226
PARLIAMENTARIAN	Mrs. Stephen C. Ferguson	1015 Harrelton Court	Evansville 47715
EDITOR	Mrs. Gene C. Laker	1412 Hawthorne Rd.	Fort Wayne 46804
CHAIRMEN OF STANDING COMMITTEES			
Bylaws	Mrs. Edsel S. Reed	111 Pawnee Drive	Jeffersonville 47130
Guidelines	Mrs. G. Beach Gattman	1319 Lawn Ave.	Elkhart 46514
Membership	Mrs. Glenn W. Irwin Jr.	5801 Sunset Ave.	Indianapolis 46208
Organization	Mrs. Herbert A. Schiller	1813 East Cedar St.	South Bend 46617
Project Bank	Mrs. Carlos Serna	1417 McArthur	Munster 46321
Program Books	Mrs. Frank B. Throop	5100 Lancelot Drive	Indianapolis 46208
CHAIRMEN OF PROGRAM EXTENSION COMMITTEES			
AMA-ERF	Mrs. Frederick Mackel	Route 1	Huntertown 46748
AMA-ERF Treasurer	Mrs. Marvin E. Priddy	3902 Bonita Place	Fort Wayne 46815
Communications	Mrs. William Golden	1929 Utica Pike	Jeffersonville 47130
Health Implementation	Mrs. David Sherman	225 Tamiami Trail	West Lafayette 47906
Health and the Quality of Life	Mrs. Jack M. Walker	Walker Road	Yorktown 47396
Legislation	Mrs. Jack M. Walker	Walker Road	Yorktown 47396
Student Contact	Mrs. John G. Pantzer	100 Gregg Road	Indianapolis 46260
Assistant Student Contact	Mrs. Clinton S. Wainscott	5332 Channing Rd.	Indianapolis 46226
AD HOC APPOINTMENTS			
Chairman of Women's Activities, 1979 ISMA Convention	Mrs. Dwight W. Schuster	6510 N. Chester Ave.	Indianapolis 46220
Chairman, House of Delegates 1979	Mrs. J. Ronald Waddell	1601 Lant Circle	Evansville 47714
Vice-Chairman	Mrs. James Robertson	7209 East Walnut St.	Evansville 47715
Vice-Chairman	Mrs. Kenneth Rudolph	742 Plaza Drive	Evansville 47715
Chaplain	Mrs. Otis Bowen	4750 N. Meridian St.	Indianapolis 46208
IMPAC	Mrs. Everett E. Bickers	Route 3, Box 572	Floyds Knobs 47119
Long Range Planning	Mrs. John R. Stanley	400 Brentwood Lane	Muncie 47304
Doctor's Day	Mrs. Robert Kurtz	R.R. 1	Tipton 46072

THE INDIANA STATE MEDICAL ASSOCIATION

3935 N. Meridian, Indianapolis 46208—Telephone 925-7545

1979 Annual Meeting—Oct. 13-17—Indianapolis

OFFICERS FOR 1978-79

President—Arvine G. Popplewell, 3530 S. Keystone, Indianapolis 46227

Treasurer—Jaseph F. Ferrara, 111 S. Water St., Franklin 46131

Assistant Treasurer—Douglas H. White, 3524 N. Meridian, Indianapolis 46208

Executive Committee—Paul W. Holtzman, Chairman; Arvine G. Popplewell, Joseph F. Ferrara, Douglas H. White, Martin J. O'Neill, John W. Beeler, Eli Goodman, Alvin J. Haley, Members

Speaker of the House—Lloyd L. Hill, 302 N. Duke St., Peru 46970

Vice Speaker—Lawrence E. Allen, 2009 Brawn St., Anderson

Executive Director—Mr. Donald F. Foy

TRUSTEES

District	Term Expires
1—John A. Bizal, Evansville	Oct. 1980
2—Harold M. Manifold, Bloomington	Oct. 1981
3—Thomas A. Neathamer, Jeffersonville	Oct. 1979
4—Howard C. Jackson, Madison	Oct. 1980
5—Paul Siebenmorgen, Terre Haute	Oct. 1981
6—Davis W. Ellis, Rushville	Oct. 1979
7—Donald C. McCallum, Indianapolis	Oct. 1980
7—John G. Pantzer, Indianapolis	Oct. 1981
8—Jack M. Walker, Muncie	Oct. 1981
9—John A. Knote, Lafayette	Oct. 1979
10—Martin J. O'Neill, Valparaiso	Oct. 1980
11—Herbert C. Khalouf, Marion	Oct. 1981
12—Alvin J. Haley, Fort Wayne (Chairman)	Oct. 1979
13—Donald S. Chamberlain, South Bend	Oct. 1980

ALTERNATES

District	Term Expires
1—E. DeVerre Gourieux, Evansville	Oct. 1979
2—Edgar R. Cantwell, Vincennes	Oct. 1980
3—Richard G. Huber, Bedford	Oct. 1980
4—Mark M. Bevers, Seymour	Oct. 1979
5—William G. Bannon, Terre Haute	Oct. 1979
6—Dan W. Hibner, Richmond	Oct. 1981
7—I. E. Michael, Indianapolis	Oct. 1979
7—Gerald J. Kurlander, Indianapolis	Oct. 1979
8—Ted S. Doles, Middletown	Oct. 1979
9—Max N. Hoffman, Covington	Oct. 1980
10—Leonard W. Neal, Munster	Oct. 1981
11—Fred C. Poehler, La Fontaine	Oct. 1980
12—Franklin A. Bryan, Fort Wayne	Oct. 1980
13—John W. Luce, Michigan City	Oct. 1979

SECTION OFFICERS 1978-79

Section on Surgery
Chairman—Donald M. Schlegel, Indianapolis
Secretary—Ted W. Grisell, Carmel

Sectian an Internal Medicine
President—Douglas H. White, Indianapolis
Secy-Treasurer—William Bastnagel, Indianapolis

Section on Family Practice
Chairman—Bernard J. Emkes, Indianapolis
Secretary—Edwin E. Stumpf, New Haven

Section an Neuralogical Surgery
Chairman—Louis W. Conway, Lafayette
Secretary—Daniel F. Cooper, Indianapolis

Section on Ophthalmology and Otolaryngology
Chairman—John Bizal, Evansville
Secretary—Daniel R. Evans, Valparaiso

Section an Anesthesiology
Chairman—Robert K. Stoelting, Indianapolis
Secretary—Dean L. Strycker, South Bend

Section on Public Health and Preventive Medicine
Chairman—Robert K. McKechnie, Jeffersonville
Secretary—David J. Edwards, Indianapolis

Section on Radiology
Chairman—William J. Miller, Lafayette
Secretary—Wallace S. Tirman, South Bend

Section on Nervaus and Mental Diseases
Chairman—Philip M. Morton, Indianapolis
Secretary—Jeffrey J. Kellams, Indianapolis

Section on Pathology and Forensic Medicine
Chairman—David E. Smith, Indianapolis
Secretary—Emmett C. Pierce, Greenfield

Section on Pediatrics
Chairman—Robert Hannemann, Lafayette
Secretary—Stephen Bash, Fort Wayne

Section on Directors of Medical Education
Chairman—Barbara Backer, LaPorte
Secretary—Robert Chevalier, Beech Grove

Section an Cutaneous Medicine
Chairman—Wm. J. Cron, Bloomington
Secretary—Ronald H. Doneff, Gary

Section on Allergy
Chairman—Paul D. Isenberg, Indianapolis
Secretary—Beauford Spencer, Bloomington

Section on Urology
Chairman—David Schlueter, Fort Wayne
Secretary—

Section an Orthopedic Surgery
Chairman—Frank B. Throop, Indianapolis
Secretary—Morris S. Friedman, South Bend

Section on Emergency Medicine
Chairman—John C. Johnson, Brownsburg
Secretary—Esther Schubert, New Castle

DELEGATES TO THE AMA

Terms expire December 31, 1980:
Delegates: George T. Lukemeyer, Indianapolis; Malcolm O. Scamahorn, Pittsboro; Ross L. Egger, Daleville.
Alternates: Robert M. Seibel, Nashville; Everett E. Bickers, Floyds Knobs; Gilbert M. Wilhelmus, Evansville.

Terms expire December 31, 1979:
Delegates: Patrick J. V. Carcoran, Evansville; Peter R. Petrich, Attica.
Alternates: Thomas C. Tyrrell, Hammond; Marvin E. Priddy, Fort Wayne.

DISTRICT MEDICAL SOCIETY OFFICERS

District	President	Secretary	Place, Date of Meeting
1.	Forrest Radcliff, Evansville	William R. Wells, Princeton	May 17, 1979, Evansville
2.	Joe Dukes, Dugger	James P. Beck, Washington	Oct. 4, 1979, Dugger
3.	Francis H. Gootee, Jasper	Charles X. McCalla, Paoli	April 30, 1980, Jasper
4.	Brockton L. Weisenberger, Columbus	John I. Cooper, Madison	May 9, 1979, Columbus
5.	J. B. Ko, Terre Haute	Clyde Jett, Seelyville	May 30, 1979, Terre Haute
6.	Hal R. Rhynearson, Fortville	Douglas Morrell, Rushville	May 2, 1979, Rushville
7.	Stephen L. Hardin, Martinsville	M. O. Scamahorn, Pittsboro	May 23, 1979, Martinsville
8.	George A. Donnally, Geneva	Eugene M. Gillium, Portland	June 13, 1979, Portland
9.	Adrian Lanning, Noblesville	John A. Knote, Lafayette	June 14, 1979, Lafayette
10.	Lee H. Trachtenberg, Munster	Barron M. F. Palmer, Hammond	June 6, 1979, Hobart
11.	Thomas R. Scherschel, Kokomo	Frederick C. Poehler, La Fontaine	Sept. 19, 1979, Kokomo
12.	Michael O. Mellinger, LaGrange	Robert H. Musselman, Fort Wayne	Sept. 20, 1979, Fort Wayne
13.	William A. Stark, Mishawaka	Michael G. Quinn, South Bend	Sept. 12, 1979, Michigan City

ISMA Committees and Commissions

COMMITTEES

EXECUTIVE
Paul W. Holtzmon, Bloomington, chairman; Arvine G. Popplewell, Indianapolis, president; Joseph F. Ferrara, Franklin, treasurer; Douglas H. White, Indianapolis, assistant treasurer; Alvin J. Haley, Fort Wayne, chairman of the Board of Trustees; Eli Goodman, Charlestown, immediate past president; John Beeler, Indianapolis, at large.

FUTURE PLANNING
Peter R. Petrich, chairman; Stanley M. Chernish, Indianapolis; Vincent J. Santare, Munster; Jack Shanklin, Vincennes; E. Henry Lamkin, Indianapolis; Carl Otten (Student Liaison).

MEDICAL EDUCATION FUND
Donald E. Wood, Indianapolis, chairman; J. O. Ritchey, Indianapolis; John W. Beeler, Indianapolis; Joe E. Dukes, Dugger; Jack M. Lockhart, Connersville.

GRIEVANCE
G. Beach Gattman, chairman, Elkhart; William G. Bannon, Terre Haute; George T. Lukemeyer, Indianapolis.

MEDICO-LEGAL
John W. Beeler, Indianapolis, chairman.

NEGOTIATIONS
Alvin J. Haley, Fort Wayne, chairman; John W. Beeler, Indianapolis; Leonard W. Neal, Munster; Donald C. McCallum, Indianapolis; Herbert C. Khalouf, Marion.

IMPAIRED PHYSICIAN
Gerald P. Johnston, Indianapolis, chairman; Richard W. Campbell, Indianapolis; Wallace R. VanDenBosch, Lafayette; Thomas E. Lunsford, Indianapolis.

COMMISSIONS

CONSTITUTION AND BYLAWS
Lester H. Hoyt, Indianapolis, chairman; Thomas Kandul, Evansville; Russell Dukes, Bloomington; Claude J. Meyer, Jeffersonville; Henry Conrad, Lawrenceburg; Warren Macy, Greencastle; C. G. Clarkson, Richmond; Loren H. Martin, Indianapolis; Wallace A. Scea, Elwood; John J. Saalwaechter, Lebanon; Frank Moxley Sturdevant, Valparaiso; Robert M. Brown, Marion; William R. Clark, Sr., Fort Wayne; John B. Guttman, Wakarusa.

CONVENTION ARRANGEMENTS
Stanley M. Chernish, Indianapolis, chairman; Eugene Austin, Evansville; James N. Topolgus, Bloomington; Richard McIlroy; Columbus; Fred Haggerty, Greencastle; James Johnson, Richmond; Thomas Alley, Indianapolis; Clarence Ashburn, Muncie; Max Hoffman, Covington; Daniel T. Ramker, Hammond; Shirley T. Khalouf, Marion; T. A. Felger, Fort Wayne; Thomas A. Neathamer, Jeffersonville; Edward C. Wheeler, Indianapolis; John O. Hildebrand, South Bend; Garry L. Bolinger, Indianapolis.

LEGISLATION
Richard L. Reedy, Yorktown, chairman; L. Ray Stewart, Evansville; Paul J. Wenzler, Bloomington; Peter H. Livingston, Bedford; Edward L. Probst, Columbus; William Strecker, Terre Haute; Kenneth Woodman, Richmond; Martin Fundenberger, Indianapolis; Dennis Nicholas, Indianapolis; Leonard W. Neal, Munster; Tom Scherschel, Kokomo; Jerry Stucky, Fort Wayne; Robert M. Sweeny, South Bend; Paul Muller, Indianapolis; Dean Grove, Indianapolis; Malcolm O. Scamahorn, Pittsboro; John A. Knote, Lafayette; Carl Otten (Student Liaison).

PUBLIC RELATIONS
Marvin Priddy, Fort Wayne, chairman; Albert S. Ritz, Evansville; Thomas O. Middleton, Bloomington; Frank P. Lloyd, Indianapolis; Robert P. Acher, Greensburg; Greg Larkin, Greencastle; Ralph Lewis Rea, Greenfield; Richard Jordan, Corydon; John Osborne, Muncie; Kenneth J. Ahler, Rensselaer; Charles D. Egnatz, Schererville; Richard Glendening, Logansport; Logan Dunlap, South Bend; Harry G. Becker, Indianapolis; Ross Egger, Daleville

MEDICAL EDUCATION
Steven C. Beering, Indianapolis, chairman; Charles Hachmeister, Evansville; David A. Byrne, Bloomington; Richard Riehl, Jeffersonville; Brockton Weisenberger, Columbus; Cleon Schauwecker, Greencastle; James R. Lewis, Richmond; Hunter Soper, Indianapolis; Eugene Gillum, Portland; T. Neal Petry, Delphi; Rex Joseph, Indianapolis; Shokri Radpour, Kokomo; Ronald Scheeringa, Fort Wayne; Wallace S. Tirman, Mishawaka; Thomas A. Gehring, Merrillville; Franklin A. Bryan, Fort Wayne; John R. Mader, Richmond; John F. Phillips, Indianapolis; John Roscoe, Indianapolis.

MEDICAL SERVICES
H. Marshall Trusler, Indianapolis, chairman; Wallace Adye, Jr., Evansville; Donald D. Cofield, Bloomington; Everett E. Bickers, Floyds Knobs; H. S. Riley, Madison; Paul E. Humphrey, Terre Haute; Joseph L. Steinem, Connersville; Albert Donato, Indianapolis; John MacDougall, Indianapolis; Theodore R. Hayes, Muncie; Carl Bruce Howland, Crawfordsville; R. James Bills, Gary; Regino B. Urgena, Marion; R. Wyatt Weaver, Angola; Jack Hannah, Elkhart; Charles Aust, Ft. Wayne; Mary Ann Callins (Student Liaison).

Ad Hoc Committees

IMMUNIZATION
Robert Parr, Indianapolis, chairman

DATA PROCESSING
James H. Gosman, Indianapolis, chairman

COUNTY MEDICAL SOCIETY DIRECTORY

County	President	Secretary
Adams	John E. Doon, Decatur	Hyung Soo T. Lee, 227 S. Second St., Decatur 46733
Allen (Fort Wayne)	Jerald L. Andrew, Fort Wayne	Robert W. Dettmer, 2828 Fairfield Ave., Fort Wayne 46806 Mr. Larry L. Pickering, Exec. Dir., 212 Med. Ctr. Bldg., Fort Wayne 46802
Bartholomew-Brown	Robert G. Reed, Columbus	Stanley R. Adkins, 380 Plaza Drive #D, Columbus 47201
Benton	A. L. Coddens, Earl Park	Manley K. Scheurich, R.R. 1, Oxford 47971
Boone	Donald Boyer, Lebonon	Charles Hodges, 905 N. Lebanon, Lebanon 46052
Carroll	Stephen C. Mayers, Flora	Robert Seese, 101 W. North St., Delphi
Cass	Joseph A. Frederick, Jr., Logansport	Joseph Wm. Bean, 2 Chase Park, Logansport 46947
Clark	Kenneth E. Hines, Sellersburg	Jerrold E. Tomlin, 1220 Spring St., Jeffersonville 47130
Clay	Robert C. Oehler, Brazil	E. L. Conrad, 1207 E. National Ave., Brazil
Clinton	Milton Erdel, Frankfort	William R. Stapleton, 1256 S. Jackson, Frankfort 46041
Daviess-Martin	Marshall Seat, Washington	James P. Beck, 1312 Bedford Rd., Washington 47501
Dearborn-Ohio	Ronald Myers, Lawrenceburg	Gerald T. Bowen, 605 Wilson Creek Road, Lawrenceburg 47025
Decatur	Gene P. Gebele, Greensburg	Arnold D. Ducanes, 215 N. Franklin St., Greensburg 47240
DeKalb	John C. Harvey, Auburn	Harland V. Hippensteel, 208 W. 7th St., Auburn 46706
Delaware-Blackford	Arthur C. Jay, Parker	Chas. J. Leiphart, 2311 W. Jackson St., Muncie 47303
Dubois	Francis Gootee, Jasper	Robert Bretz, St. Joseph Hospital, Huntingburg 47542
Elkhart	James D. Finfrock, Elkhart	Page E. Spray, 320 W. High St., Elkhart
Fayette-Franklin	Joseph L. Steinem, Connersville	Joseph L. Steinem, 818 Grand Ave., Connersville 47331
Floyd	William V. Croft, New Albany	Daniel H. Cannon, 1201 E. Spring St., New Albany
Fountain-Warren	Hugh C. Brenner, Williamsport	Theodore Person, 601 N. Mill St., Veedersburg
Fulton	James P. Schalliol, Rochester	Joseph D. Richardson, 121 West 8th St., Rochester 46975
Gibson	James F. Peck, Princeton	R. E. Weitzel, 114 S. Hart, Princeton 47670
Grant	L. D. Wojcik, Marion	E. S. Rifner, Van Buren
Greene	Robert Moses, Worthington	Harry Rotman, Jasonville
Hamilton	A. Adrion Lanning, Noblesville	Paul M. Waitt, 450 Lafayette Rd., Noblesville 46060
Hancock	Gary C. Sharp, Greenfield	Harry T. Hensley, 11929 E. 65th St., Oaklandon 46236
Harrison-Crawford	W. J. Brockman, Corydon	D. J. Dukes, 439 E. Chestnut, Corydon 47112
Hendricks	Joseph Kerlin, Danville	Wm. A. Edwards, 1655 Hawthorn Dr., Plainfield 46168
Henry	David Eggert, New Castle	Donald E. Vivian, Henry Co. Hospital, New Castle 47362
Howard	Thomos R. Scherschel, Kokomo	Ronald T. Maus, 800 S. Berkley, Kokomo 46901
Huntington	William J. Webb, Huntington	Piyush J. Shah, 1159 Etna Ave., Huntington 46750
Jackson	Mork M. Bevers, Seymour	Joel M. McGill, 213 E. Cross St., Brownstown 47220
Jasper	Michael Louck, Rensselaer	Francis E. O'Brien, Washington St., Rensselaer 47978
Jay	A. E. Lopez, Portland	Joseph F. Vormohr, 604 W. Arch St., Portland 47371
Jefferson-Switzerland	Elton Heaton, Madison	Ott B. McAtee, Madison State Hospital, Madison
Jennings	F. Richord Walton, North Vernon	John B. Schuck, Doctors' Park #2, 311 Henry St., North Vernon 47265
Johnson	Steven A. Weber, Franklin	Chandrabhan Singh, Johnson Co. Memorial Hospital, Franklin 46131
Knox	James A. Koontz, Vincennes	Jay R. Tuttle, 14 S. Third St., Vincennes 47591
Kosciusko	David W. Haines, Warsaw	George A. Ros, 827 S. Union St., Warsaw 46580
LaGrange	Millard R. Taylor, Howe	Evan C. Thompson, P.O. Box 217, Topeka 46571
Lake	Thomas A. Gehring, Merrillville	Mary E. Carroll, 124 N. Main St., Crown Point 46307 Mr. John B. Twyman, Ex. Dir., 6685 Broadway, Merrillville 46410
LaPorte	Donald L. Weninger, Michigan City	King S. Jones, P.O. Box 383, Michigon City 46360 Orville A. Schumm, Exec. Dir., 110 South Ave., La Porte 46350
Lawrence	Gerald E. Kasting, Bedford	Gareth A. Morgan, 1618—24th St., Bedford 47421
Madison	William C. VanNess II, Summittville	Diane Van Ness, R.R. #4, Box 352A, Alexandria 46001
Marion	John D. MacDougall, Beech Grove	H. Marshall Trusler, 1144 Consolidated Bldg., Indianapolis 46204 Mr. Harold W. Hefner, Exec. Dir., 211 N. Delaware St., Indianapolis 46204
Marshall	Marshall E. Stine, Breman	Byron Holm, 304 N. Walnut, Plymouth 46563
Miami	Maurice Sixbey, Denver	A. L. Baluyut, 29 E. Main, Peru 46970
Montgomery	Fred P. Warbinton, Crawfordsville	Jack L. Foltz, 1407 Darlington Ave., Crawfordsville 47933
Morgan	O. R. Wilson, Morgantown	Joyce Bronham, 2209 John R. Wooden Dr., Martinsville 46151
Newton	Marcelino F. Guzan, Morocco	John C. Parker, Box 366, Goodland 47948
Noble	John E. Ramsey, Kendallville	Carl F. Stallman, R.R. 3, Kendallville 46755
Orange	Charles X. McCalla, Paoli	Philip T. Hodgin, 420 N. Maple, Orleans 47432
Owen-Monroe	D. Dean Cofield, Bloomington	Robert Wrenn, 711 W. Second St., Bloomington 47401 Arlene Rhea, Exec. Secy, 1920 E. Third St., Bloomington 47401
Parke-Vermillion	George Alexandrescu, Clinton	J. Franklin Swaim, P.O. Box 185, Rockville 47872
Perry	Robert Gilbert, Tell City	Robert A. Ward, Professional Bldg., Tell City 47856
Pike	Donald L. Hall, Petersburg	Donald L. Hall, 7th and Poplar, Petersburg 47567
Porter	Charles Griffin, Valparaiso	Owen H. Lucos, 700 S. Calumet Road, Chesterton 46304
Posey	John R. Crist, Mt. Vernon	Herman Hirsch, 130 W. 5th St., Mt. Vernon 47620
Pulaski	Harold J. Halleck, Winomac	William R. Thompson, 111 N. Monticello St., Winamac 46996
Putnam	Fred Haggerty, Greencastle	F. R. Dettloff, 407 Melrose Ave., Greencastle 46135
Randolph	Jerome M. Leahey, Union City	C. R. Miranda, 702 Browne St., Winchester 47394
Ripley	Manuel G. Garcia, Batesville	A. E. Jaojoco, Margaret Mary Hospital, Batesville 47006
Rush	Davis W. Ellis, Rushville	Harry G. McKee, 208 W. First St., Rushville 46173
St. Joseph	Richard Schaphorst, Mishawaka	Richard Buck, 51916 U.S. 31 North, South Bend 46615 Mrs. Rose Vance, Exec. Secy., 2015 Western Ave., South Bend 46629
Scott	Manuel T. Dancel, Scottsburg	Wm. M. Scott, Medical Arts Bldg., Highway 31 North, Scottsburg 47170
Shelby	Dar Muceno, Shelbyville	William D. Haehl, 1640 East St. #44, Shelbyville 46176
Spencer	Michael O. Monar, Rockport	John C. Glackmon, Jr., Rockport 47635
Starke	Yu Hong Law, Knox	Earl Leinbach, Pearl & Main, Hamlet 46532
Steuben	R. Wyatt Weaver, Angola	K. L. Kissinger, 411 E. Eilmore St., Angola 46703
Sullivan	John R. Taylor, Palestine	Joe Dukes, South Third St., Dugger 47848
Tippecanoe	Barbara J. Bourland, W. Lafayette	Paula Meluch, c/o 2424 Ferry St., Lafayette 47904
Tipton	J. H. Meredith, Tipton	A. E. Stouder, Jr., R.R. 4, Doctors' Park, Tipton 46072
Vanderburgh	Wallace M. Adye, Evansville	Mrs. Carole Rust, Exec. Dir., 421 N. Main St., Evansville 47711
Vigo	Harvey C. Boyd, Terre Haute	James W. Cristee, 400 8th Ave., Terre Haute 47804 William L. Purcell, Exec. Dir., P.O. Box 986, Terre Haute 47801
Wabash	Charles R. Lyons, Wabash	Parks M. Adams, Jr., 1103 N. Wayne St., N. Manchester 46962
Warrick	Robert C. Colvin, Newburgh	Wm. G. West, Jr., P.O. Box 558, Newburgh 47630
Washington	Charles B. Carty, Pekin	Thomas R. Northcott, 102 N. Harrison, Salem 47167
Wayne-Union	C. G. Clarkson, Richmond	Bryan Park, 1380 Chester Blvd., Richmond 47374
Wells	Louis F. Brodley, Bluffton	James E. Umphrey, 303 S. Main St., Bluffton 46714
White	Nolan A. Hibner, Monticello	Paul P. VanKirk, 105 W. Washington St., Monticello 47960
Whitley	Robert Roth, Columbia City	Alfred F. Allina, 19 Blue River E., Columbia City 46725

Membership Report for 1978

December 31, 1978

COUNTY	ACTIVE	EXEMPT	ISMA TOTAL	AMA TOTAL
Adams	12	1	13	11
Bartholomew-Brown	72	11	83	61
Benton	3	1	4	3
Boone	10	6	16	11
Carroll	8	2	10	9
Cass	32	2	34	25
Clark	65	2	67	39
Clay	7	3	10	9
Clinton	8	3	11	9
Daviess-Martin	14	3	17	10
Dearborn-Ohio	19	1	20	12
Decatur	8	1	9	8
De Kalb	11	4	15	14
Delaware-Blackford	124	14	138	88
Dubois	23	3	26	22
Elkhart	106	8	114	82
Fayette-Franklin	21	2	23	19
Floyd	48	5	53	36
Ft. Wayne-Allen	322	43	365	302
Fountain-Warren	9	2	11	9
Fulton	5	2	7	5
Gibson	6	5	11	11
Grant	68	10	78	68
Greene	10	5	15	10
Hamilton	19	3	22	15
Hancock	25	—	25	16
Harrison-Crawford	6	3	9	8
Hendricks	30	2	32	20
Henry	33	4	37	29
Howard	70	6	76	68
Huntington	17	5	22	11
Indianapolis-Marion	1,105	147	1,252	978
Jackson	17	3	20	16
Jasper	10	—	10	8
Jay	12	3	15	12
Jefferson-Switzerland	26	3	29	15
Jennings	4	—	4	4
Johnson	36	2	38	20
Knox	41	4	45	39
Kosciusko	20	1	21	14
LaGrange	8	1	9	5
Lake	506	33	539	453
LaPorte	79	12	91	75
Lawrence	38	5	43	27
Madison	94	15	109	62
Marshall	21	—	21	17
Miami	13	3	16	13
Montgomery	20	4	24	11
Morgan	17	3	20	13
Newton	6	—	6	4
Noble	11	3	14	11
Orange	8	1	9	5
Owen-Monroe	111	9	120	66
Parke-Vermillion	12	2	14	7
Perry	5	2	7	7
Pike	2	—	2	1
Porter	85	6	91	79
Posey	3	3	6	6
Pulaski	5	1	6	3
Putnam	12	3	15	14
Randolph	11	7	18	12
Ripley	7	2	9	6
Rush	11	1	12	9
St. Joseph	225	40	265	259
Scott	7	2	9	9
Shelby	17	3	20	13
Spencer	2	—	2	—
Starke	7	2	9	8
Steuben	12	2	14	11
Sullivan	8	3	11	9
Tippecanoe	156	24	180	145
Tipton	8	4	12	11
Vanderburgh	317	36	353	287
Vigo	110	21	131	92
Wabash	22	3	25	12
Warrick	15	1	16	5
Washington	8	—	8	7
Wayne-Union	74	10	84	71
Wells	45	7	52	49
White	7	1	8	8
Whitley	9	2	11	10
TOTALS	4,616	602	5,218	4,058

Deaths of Indiana Physicians in 1978

(M) Member ISMA (S) Senior Member (R) Retired

Name	Age	Date of Death	Address
Elmer L. Wallace	53	Jan. 1	New Albany
Alexander W. Rhind (R)	79	Jan. 2	Hammond
Charles C. DuBois (S)	99	Jan. 6	Warsaw
Robert K. Webster (R)	73	Jan. 13	Brazil
William R. Tindall (R)	73	Jan. 14	Shelbyville
Harold C. Thornton (S)	75	Jan. 16	Indianapolis
Donn R. Gossom	64	Jan. 26	Terre Haute
Clarence M. Harless (M)	86	Jan. 27	Chesterton
Marion J. Eaton (S)	76	Feb. 1	Lafayette
C. Bowen DeMotte (S)	78	Feb. 9	Greenwood
Joseph T. Brock	58	Feb. 19	New Castle
Joseph B. Quigley	67	Feb. 19	Indianapolis
Harry E. Voyles, Sr. (R)	81	Feb. 20	New Albany
Richard J. Schulfer	57	Feb. 28	Hammond
John B. Mitchell	52	March 3	Evansville
Norman M. Silverman	71	March 11	Terre Haute
Harvey N. Middleton (S)	83	March 18	Indianapolis
Jackson W. Modisett (M)	58	March 26	Madison
Milton H. Omstead (M)	68	April 3	Petersburg
Fielding P. Williams (M)	65	April 9	Huntingburg
Thomas G. Donovan	33	April 9	Evansville
Joseph Shapiro (M)	62	April 12	East Chicago
Harold Hall Davidson (M)	56	May 1	Evansville
Stanley W. Burwell (M)	62	May 8	Muncie
Howard T. Hammel (M)	56	May 18	Springville
Cecil S. Wright (S)	83	May 22	Anderson
Bertrand H. Pulskamp (S)	77	May 22	Wolcottville
Victor A. Teixler (M)	67	June 11	Indianapolis
Casper Harstad (S)	80	June 17	Rockville
Arthur N. Jay (M)	68	June 22	Indianapolis
Rollin H. Moser (S)	81	June 26	Belleair Beach, Fla.
J. William McBride (M)	40	June 30	Michigan City
Byron K. Zaring (M)	72	July 5	Columbus
Donald R. Hampshire (M)	62	July 6	Indianapolis
Opal L. Wood (M)	71	July 8	Brazil
Bob R. Cagle (M)	48	July 19	New Palestine
Stanley E. McClure (M)	76	July 19	Monon
W. Russell Springstun (S)	72	July 24	Evansville
Clarence E. Sherwood	86	July	Brookings, S.D.
Leonard Locke Nesbit (S)	79	Aug. 4	Anderson
Paul A. F. Walter III (M)	53	Aug. 6	Evansville
Thomas B. Pauszek (M)	80	Aug. 9	South Bend
Sallie Tyrrell		Aug. 10	Calumet City
Milton F. Popp (M)	70	Aug. 16	Fort Wayne
Raymond R. Calvert (S)	79	Aug. 23	Lafayette
Dale L. Carlberg (M)	68	Aug. 27	Jeffersonville
Ralph V. Everly (M)	70	Aug. 27	Indianapolis
Frederick W. Buechner (M)	78	Sept. 14	South Bend
Harry S. Feinn (M)	66	Sept. 18	LaPorte
Alan L. Sparks (M)	76	Oct. 18	Indianapolis
David Hadley (M)	64	Oct. 19	Indianapolis
Herman G. Baker (R)	89	Nov. 9	Evansville
Garre E. Blair (M)	31	Nov. 10	Vevay
Warren Baker (S)	82	Nov. 13	Michigan City
Altamont H. Bracey, III	40	Nov. 22	Lafayette
Daniel D. Stiver	70	Nov. 27	South Bend
Emil H. Dowell (R)	83	Nov. 28	Rockville
Melvin Lichtenberg (M)	64	Dec. 4	Indianapolis
James A. Harshman (M)	48	Dec. 11	Kokomo
Frank J. Kendrick (M)	77	Dec. 16	Goshen
David A. Eisenberg (M)	68	Dec. 17	Martinsville

Presidents of ISMA Since Its Organization

	Elected	Served
Medical Convention		
*Livingston Dunlap, Indianapolis	1849	1849
Medical Society		
*William T. S. Cornett, Versailles	1849	1850
*Ashahel Clapp, New Albany	1850	1851
*George W. Mears, Indianapolis	1851	1852
*Jeremiah H. Brower, Lawrenceburg	1852	1853
*Elizur H. Deming, Lafayette	1853	1854
*Madison J. Bray, Evansville	1854	1855
*William Lomax, Marion	1855	1856
*Daniel Meeker, LaPorte	1856	1857
*Talbot Bullard, Indianapolis	1857	1858
*Nathan Johnson, Cambridge City	1858	1859
*David Hutchinson, Mooresville	1859	1860
*Benjamin S. Woodworth, Ft. Wayne	1860	1861
*Theophilus Parvin, Indianapolis	1861	1862
*James F. Hibberd, Richmond	1862	1863
*John Sloan, New Albany	1863	
*John Moffett (acting), Rushville	1863	1864
*Samuel L. Linton, Columbus	1864	
*Wilson Lockhart (acting), Danville	1864	1865
*Myron H. Harding, Lawrenceburg	1865	1866
*Vierling Kersey, Richmond	1866	1867
*John S. Bobbs, Indianapolis	1867	1868
*Nathaniel Field, Jeffersonville	1868	1869
*George Suttan, Aurora	1869	1870
*Robert N. Todd, Indianapolis	1870	1871
*Henry P. Ayres, Ft. Wayne	1871	1872
*Joel Pennington, Milton	1872	1873
*Isaac Casselberry, Evansville	1873	
*Wilson Hobbs (acting), Knightstown	1873	1874
*Richard E. Houghton, Richmond	1874	1875
*John H. Helm, Peru	1875	1876
*Samuel S. Boyd, Dublin	1876	1877
*Luther D. Waterman, Indianapolis	1877	1878
*Louis Humphreys, South Bend	1878	
*Benj. Newland (acting), Bedford (v.p.)	1878	1879
*Jacob R. Weist, Richmond	1879	1880
*Thomas B. Harvey, Indianapolis	1880	1881
*Marshall Sexton, Rushville	1881	1882
*William H. Bell, Logansport	1882	1883
*Samuel E. Mumford, Princeton	1883	1884
*James H. Woodburn, Indianapolis	1884	1885
*James S. Gregg, Ft. Wayne	1885	1886
*General W. H. Kemper, Muncie	1886	1887
*Samuel H. Charlton, Seymour	1887	1888
*William H. Wishard, Indianapolis	1888	1889
*James D. Gatch, Lawrenceburg	1889	1890
*Gonsolvo C. Smythe, Greencastle	1890	1891
*Edwin Walker, Evansville	1891	1892
*George F. Beasley, Lafayette	1892	1893
*Charles A. Daugherty, South Bend	1893	1894
*Elijah S. Elder, Indianapolis	1894	
*Charles S. Bond (acting), Richmond	1894	1895
*Miles F. Porter, Ft. Wayne	1895	1896
*James H. Ford, Wabash	1896	1897
*William N. Wishard, Indianapolis	1897	1898
*John C. Sexton, Rushville	1898	1899
*Walker Schell, Terre Haute	1899	1900
*George W. McCaskey, Ft. Wayne	1900	1901
*Alembert W. Brayton, Indianapolis	1901	1902
*John B. Berteling, South Bend	1902	1903
*Jonas Stewart, Anderson	1903	1904
*George T. MacCoy, Columbus	1904	1905
*George H. Grant, Richmond	1905	1906
*George J. Cook, Indianapolis	1906	1907
*David C. Peyton, Jeffersonville	1907	1908
*George D. Kahlo, French Lick	1908	1909
*Thomas C. Kennedy, Shelbyville	1909	1910
*Frederick C. Heath, Indianapolis	1910	1911
*William F. Howat, Hammond	1911	1912
*A. C. Kimberlin, Indianapolis	1912	1913
*John P. Salb, Jasper	1913	1914
*Frank B. Wynn, Indianapolis	1914	1915
*George F. Keiper, Lafayette	1915	1916
*John H. Oliver, Indianapolis	1916	1917
*Joseph Rilus Eastman, Indianapolis	1917	1918
*William H. Stemm, North Vernon	1918	1919
*Charles H. McCully, Logansport	1919	1920
*David Ross, Indianapolis	1920	1921
*William R. Davidson, Evansville	1921	1922
*Charles H. Good, Huntington	1922	1923
*Samuel E. Earp, Indianapalis	1923	1924
*Eldridge M. Shanklin, Hammond	1924	1925
Medical Association		
*Charles N. Cambs, Terre Haute	1925	1926
*Frank W. Cregor, Indianapolis	1926	1927
*George R. Daniels, Marion	1926	1928
*Charles E. Gillespie, Seymour	1927	1929
*Angus C. McDonald, Warsaw	1928	1930
*Alois B. Graham, Indianapolis	1929	1931
*Franklin S. Crackett, Lafayette	1930	1932
*Joseph H. Weinstein, Terre Haute	1931	1933
*Everett E. Padgett, Indianapolis	1932	1934
*Walter J. Leach, New Albany	1933	1935
*Rascoe L. Sensenich, South Bend	1934	1936
*Edmund D. Clark, Indianapalis	1935	1937
*Herman M. Baker, Evansville	1936	1938
*Edmund M. Van Buskirk, Ft. Wayne	1937	1939
*Karl R. Ruddell, Indianapolis	1938	1940
*Albert M. Mitchell, Terre Haute	1939	1941
*Maynard A. Austin, Anderson	1940	1942
*Carl H. McCaskey, Indianapolis	1941	1943
*Jacob T. Oliphant, Farmerburg	1942	1944
*Nelson K. Forster, Hammond	1943	1945
*Jesse E. Ferrell, Fortville	1944	1946
*Floyd T. Romberger, Lafayette	1945	1947
*Cleon A. Nafe, Indianapolis	1946	1948
*Augustus P. Hauss, New Albany	1947	1949
*C. S. Black, Warren	1948	1950
*Alfred Ellison, South Bend	1949	1951
*J. William Wright, Indianapolis	1950	1952
*Paul D. Crimm, Evansville	1951	1953
*Wm. Harry Howard, Hammond	1952	1954
*Walter L. Portteus, Franklin	1953	1955
*Walter U. Kennedy, New Castle	1954	1956
*Elton R. Clarke, Kokomo	1955	1957
M. C. Topping, Terre Haute	1956	1958
Kenneth L. Olson, South Bend	1957	1959
*Earl W. Mericle, Indianapolis	1958	1960
Guy A. Owsley, Hartford City	1959	1961
*Harry R. Stimson, Gary	1960	1962
Maurice E. Glock, Fort Wayne	1961	1963
Donald E. Wood, Indianapolis	1962	1964
Joseph M. Black, Seymour	1963	1965
*Kenneth O. Neumann, Lafayette	1964	1966
Eugene S. Rifner, Van Buren	1965	1967
*G. O. Larson, LaPorte	1966	1968
Patrick J. V. Corcoran, Evansville	1967	1969
Lowell H. Steen, Hammond	1968	1970
Malcolm O. Scamahorn, Pittsboro	1969	1971
Peter R. Petrich, Attica	1970	1972
James H. Gosman, Indianapolis	1971	1973
Joe Dukes, Dugger	1972	1974
Gilbert M. Wilhelmus, Evansville	1973	1975
Vincent J. Santare, Munster	1974	1976
John W. Beeler, Indianapolis	1975	1977
Eli Goodman, Charlestown	1976	1978
*James A. Harshman, Kokomo	1978	1978
Arvine G. Popplewell, Indianapolis	1978	1980

*Deceased.

NEWS NOTES



IT ALL STARTED ABOUT 40 YEARS AGO--RIGHT AFTER THE CEREMONY.

Diplomates

The following ISMA members have been named diplomates of the American Board of Family Practice:

Dr. Thomas H. Black, Greencastle;
Dr. William H. Hathaway, Auburn;
Dr. Allen S. Martin, Shipshewana;
Dr. Eddie T. Pappas, Merrillville;
Dr. Susan K. Pyle, Union City.

Dr. Christopher G. Rehme of Indianapolis was named a diplomate of the American Board of Dermatology.

Come Again?

Thomas A. Murphy, chairman of the General Motors Corp., says, "Economists seem to be indulging in a deadly kind of competition trying to outdo one another in predicting when the bottom will finally fall out and our country plunge back into another economic recession. It's been that the economists have predicted twelve of the last five recessions accurately . . ."

Physician Recognition Awards

The following Indiana physicians are recent recipients of the AMA's Physician Recognition Award. This award is official documentation of Continuing Medical Education hours earned, and is acceptable proof in most states requiring CME in re-registration that the mandatory hours of CME have been accomplished.

Adye, Wallace M., Evansville
Almase, Rodolfo M., Hobart
Anderson, Milton H., Evansville
Ang, Rosa U. T., Richmond
Archangel, Cesar S., Jeffersonville
Athar, Shahid, Indianapolis
Bennett, Abner P., Evansville
Blue, Earl R., Kokomo
Blythe, Jerry E., Indianapolis
Boen, Bradley N., Indianapolis
Booth, Franklin M., South Bend
Brill, Joseph B., Jeffersonville
Brown, Thomas C., Vincennes
Chamblee, Roland W., South Bend
Chow, Philip P., Evansville
Cline, Donald L., Indianapolis
Cofield, Donald D., Bloomington
Cortese, Thomas A., Indianapolis
Csicsko, John F., Fort Wayne
Deardorff, Dale D., Mishawaka
Divcic, Borivoj S., Valparaiso
Ducanes, Arnold D., Greensburg
Fitzpatrick, James S., Portland
Fortner, William R., New Albany
France, Lloyd C., Plymouth
Frieske, David A., Valparaiso
Gohil, Jivanlal P., Kokomo
Goldenberg, Mitchell E., Munster
Goldsmith, David A., Marion
Gray, Kenneth L., Speedway
Green, Oscar, Indianapolis
Hill, Theodore A., Michigan City
Hogan, Thomas W., Terre Haute
Hunt, James A., Indianapolis
Inlow, Paul M., Shelbyville
Johnston, Gerald P., Indianapolis
Kooiker, John E., Indianapolis
Korn, Jerome M., Gary
Lands, Robert M., Crown Point
Larson, Michael S., Munster
Manders, Karl L., Indianapolis
Marks, John S., Indianapolis
Mauzy, Merritt C., South Bend
McAdams, Hugh B., Lafayette
McDonald, Joseph D., Evansville
Milan, Joseph F., Bloomington
Monn, Larry N., Carmel
Moore, Thomas S., Indianapolis
Nacino, Irineo M., Newburgh
Nelson, Francis D., South Bend
Olvey, Ottis N., Indianapolis
Overley, Toner M., Indianapolis
Paik, Geun S., Michigan City
Palmer, Robert M., Indianapolis
Pontaoe, Alejandro G., Evansville
Poulos, James T., Lafayette
Pratt, George B., Zionsville
Price, Robert W., Elkhart
Pulcini, John D., Evansville
Qazi, Haroon M., Indianapolis
Raber, Robert M., Indianapolis
Ray, Alan S., Anderson
Raves, Joseph L. H., Princeton
Reed, Edsel S., Jeffersonville
Rendel, Donald T., Munster
Rifner, Eugene S., Van Buren
Riley, Paul D., Indianapolis
Rogers, Donald B., Madison
Rogge, James D., Indianapolis
Roof, Roger S., Greencastle
Sartore, Gilbert A., Evansville
Showalter, John R., Terre Haute
Simmons, James E., Indianapolis
Spencer, Frederic, Vincennes
Stilwell, William R., Richmond
Tondra, John M., Indianapolis
Tower, James H., Shelbyville
Trusler, H. Marshall, Indianapolis
Vormohr, Joseph F., Portland
Wheeler, Lawrence A., Indianapolis
Wiesert, Kenneth N., Indianapolis
Williams, Charles F., Indianapolis
Wongse Sanit, Yong Y., Crown Point

NEWS NOTES



SOMEDAY ALL THIS WILL BE YOURS--IF YOU GET A HAIRCUT.



"Efficiency is the key to your practice"

Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE

6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

ASIM Testifies

Officials of the American Society of Internal Medicine testified recently before the Senate Finance Committee in support of catastrophic medical insurance. The testimony favored better insurance coverage for the poor and also better health insurance through the private sector. Testimony was offered which stressed that catastrophic insurance was the first priority.

Health Planning Workshop

A Midwest Regional Health Planning Workshop, sponsored by the AMA, will be held at the Chicago Hyatt Regency O'Hare June 15-16. The workshop is designed especially for physicians involved in HSA and SHCC activities. Discussed will be such topics as national and local health planning guidelines, rural health planning, the regulatory aspect of health planning, and HSP implementation.

THE JOURNAL Wins Journalism Award

For the second time in three years, THE JOURNAL of the Indiana State Medical Association has been named a winner in the annual medical journalism competition conducted by Sandoz Pharmaceuticals of East Hanover, N.J.

THE JOURNAL has been selected for special recognition based on its "redesign and other improvements" made during 1978, according to Craig D. Burrell, M.D., vice president of Sandoz, Inc. The ISMA magazine will be presented $250 and a certificate as recognition. Also selected for awards in the same category were SACRAMENTO MEDICINE and the HARRIS COUNTY PHYSICIAN NEWSLETTER, Houston, Texas.

THE JOURNAL received first prize in the 1976 competition, which is designed to develop journalistic skills among small-circulation, specialized publications. The latest award credits THE JOURNAL with having "brighter and more colorful covers and interior pages, standardized department heads, larger headlines and bolder use of white space, boxes and other graphics techniques." The judges cited Frank B. Ramsey, M.D., editor for 30 years, and Martin T. Badger, managing editor since December 1977, for "adding impact to quiet conservatism."

Another winner in the 1978 Sandoz competition was THE MARION COUNTY MEDICAL SOCIETY BULLETIN, published in Indianapolis. Its editor is Harold W. Hefner, executive director of the society, and the supervisor of publications is Jackie Stahl. It, too, was redesigned last year, with larger headlines and body type and increased use of art. It also features summaries of meetings rather than verbatim reports.

NEWS NOTES

Medical Student Warning

A medical student is an unlicensed layman who could be criminally charged with practicing medicine without a license should he or she diagnose, prescribe or administer treatment without the immediate direction, supervision and control of a physician, according to the AMA. Hospitals and teaching institutions in which medical students come in contact with patients should insure that these individuals are clearly identified as "student doctors," not "doctors," to avoid possible malpractice suits.

Gubernatorial Appointments

Dr. Arvine G. Popplewell, president of the ISMA, has been appointed to the Statewide Health Coordinating Council by Governor Otis R. Bowen, M.D. **Dr. W. Lloyd Bridges** of Fort Wayne also was appointed to the council. Reappointed were **Dr. W. Randall Long** of Indianapolis and **Dr. Harold Manifold** of Bloomington.

Brain Death Model Law

Currently accepted medical standards permit a physician to determine that a patient is dead when his brain is dead; but statutory or judicial law in many states (including Indiana) has not yet caught up with actuality.

The AMA has drafted a model state bill that reiterates the prerogative of the physician to declare an individual dead in accordance with accepted medical standards, one of which is irreversible cessation of brain function. Copies have been sent to state medical associations for consideration.

The model bill recognizes advances in medical technology which have made it medically acceptable to declare death on bases other than the traditional heart and lung failure. It also provides immunity from liability for persons acting in accordance with a declaration of brain death.

The AMA says passage of the bill is important because it will alleviate serious delay in obtaining human organs for transplant.

Poison Center Opens

The Indiana Poison Center has been opened in Indianapolis to provide 24-hour information on poison treatment. It is located in Wishard Memorial Hospital and is funded through grants from Blue Cross-Blue Shield of Indiana and the State Board of Health. For poison information, call (317) 630-7351.

Here and There . . .

. . . **Dr. Phillip B. Kinman** of Vincennes has been admitted to Fellowship in the American Academy of Orthopaedic Surgeons.

. . . **Dr. Dale F. Leonard**, one of Hagerstown's two practicing family physicians, has been commissioned a lieutenant commander in the Navy and is now stationed in Key West, Fla.

. . . **Dr. Edward L. Hollenberg** of Winamac and **Dr. John D. Miller** of Zionsville have been appointed to three-year terms with the state's Medical Registration and Examining Board.

. . . **Dr. D. Edmund Storey** has been elected president of Winona Memorial Hospital, Indianapolis; **Dr. Frank B. Throop** was named president-elect and **Dr. John S. Schechter** became secretary-treasurer.

. . . **Dr. William T. Paynter,** formerly state health commissioner, assumed new duties June 1 as associate dean of the I.U. School of Medicine and medical director of Wishard Memorial Hospital, Indianapolis. He holds the rank of professor of psychiatry.

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Immediate delivery on many 1979 models

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594

NEWS NOTES

McDonald's to Repeat 100% Immunization Push in Central Indiana

Encouraged by the support given to last year's promotion of 100% immunization against childhood diseases, McDonald's Restaurants of Central Indiana are repeating the program in 1979.

The restaurant operators again will offer a free hamburger to each young person who has completed the full series of immunizations recommended by his doctor for his age.

Pads of authorization slips for the hamburgers are being mailed to all pediatricians, general practitioners and family physicians in a 27-county area. Those physicians who prefer may use their own letterhead for a signed statement that a child qualifies for a hamburger award.

McDonald's is directing the immunization promotion toward pre-schoolers and teenagers as well as elementary school children who are required by law to be immunized. The McDonald's operators in Central Indiana are making their promotional materials used in the campaign available to McDonald's operators in other parts of the state should they be interested in expanding it beyond the 27-county area.

Those counties now included in the campaign area are: Bartholomew, Boone, Brown, Carroll, Cass, Clinton, Delaware, Grant, Hamilton, Hancock, Hendricks, Henry, Howard, Jackson, Johnson, Lawrence, Madison, Marion, Miami, Morgan, Monroe, Montgomery, Putnam, Randolph, Shelby, Tippecanoe and Tipton.

Supplemental Insurance Plans

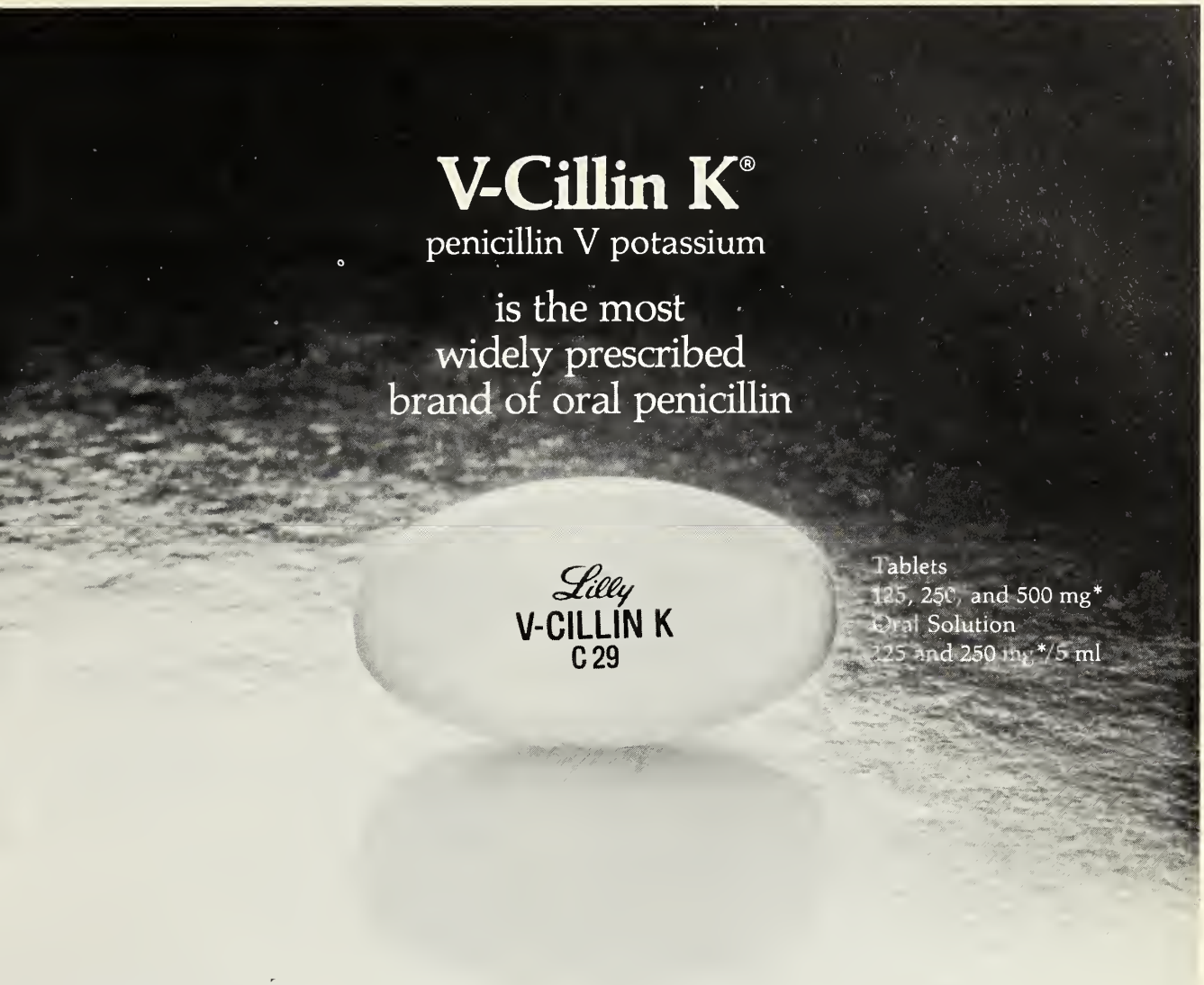
Two additions have been made to the ISMA physician's package of supplemental insurance plans.

A new In-Hospital Protection Plan provides cash benefits of $20 to $100 per day directly to the insured member and starts the first day of covered hospitalization. Intensive care and convalescent home benefits are included. Spouses and eligible dependent children may be included. Benefits are reduced at age 65.

The Medicare Supplement Plan provides "gap filler" benefits that coincide with the Medicare revisions that took effect Jan. 1. The plan supplements Medicare Parts A and B.

ISMA headquarters can provide more information on these and four other supplemental plans: Income Protection, Excess Major Medical, Overhead Expense, and Family Insurance.





V-Cillin K®
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. [102175]

***Equivalent to penicillin V.**

Additional information available to the profession on request.

Lilly

Eli Lilly and Company
Indianapolis, Indiana 46206

900416

CME QUIZ

Neonatal Seizures

CONTINUED FROM PAGES 409-413

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana University School of Medicine, Division of Postgraduate and Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46202.**

Answer the following questions:

1. Jitteriness can be differentiated from seizures in the newborn because:
 a. There is no abnormality of eye movement with jitteriness whereas there is with seizures.
 b. Jitteriness can be stimulated whereas seizures cannot.
 c. The movement with jitteriness is fast in both directions.
 d. The movement with seizures is fast in one direction and slow in the other.
 e. All of the above
2. The most important initial step in the approach to the newborn with seizures is:
 a. Administration of phenobarbital.
 b. Administration of Valium.
 c. Diagnosing and treating the cause of seizures.
 d. None of the above
3. All of the following are common causes of seizures except:
 a. Hypoglycemia
 b. Hypocalcemia
 c. Familial seizures
 d. Meningitis
 e. Developmental anomalies
4. All of the following concerning seizures in infants with neonatal asphyxia are true except:
 a. Seizures are frequently difficult to treat and require the use of both phenobarbital and Dilantin.
 b. Vigorous resuscitative efforts in the delivery room may be helpful in preventing asphyxia and seizures resulting from asphyxia.
 c. Seizures usually present in the first one to two hours of life.
 d. All of the above are correct.
5. All of the following lab tests should be done in the immediate (within an hour) evaluation of the patient with seizures except:
 a. Blood glucose
 b. Blood calcium
 c. Spinal tap
 d. EEG
6. All of the following concerning treatment of seizures are correct except:
 a. Phenobarbital should be administered intravenously 10 mg/kg.
 b. Phenobarbital may be used orally for the initial treatment of seizures.
 c. It is necessary to monitor serum anticonvulsant levels in patients on phenobarbital and/or Dilantin.
 d. If, after initial dose of phenobarbital, infant is still having seizures, another 10 mg/kg may also be administered.
7. Chronic maternal use of the following drugs may cause withdrawal signs except:
 a. Darvon (propoxyphene)
 b. Morphine
 c. Phenobarbital
 d. Librium (chlordiazopoxide)
 e. All of the above may cause withdrawal
8. Infants with seizures have the best prognosis if the cause of the seizure is:
 a. Asphyxia
 b. Intraventricular hemorrhage
 c. Subarachnoid hemorrhage
 d. Developmental CNS anomalies
9. All of the following concerning -caine drug (e.g., bupivacaine) toxicity from a paracervical block are true except:
 a. In order to get into the fetus the drug must be accidentally injected into the fetal head.
 b. The seizures may occur within the first few hours of life.
 c. The drug may cause seizures in the newborn.
 d. The drug may be absorbed into the maternal blood stream and then get into the fetus by transplacental passage.
10. Which of the following statements concerning neonatal polycythemia is not true?
 a. Polycythemia is defined as a heelstick Hct $>$60-65%.
 b. Symptoms include respiratory distress and neurologic sign.
 c. Polycythemia may be more common in SGA babies.

Neonatal Seizures

The following are answers to the CME quiz that appeared in the May issue of THE JOURNAL. The article upon which the questions were based was "Radiology of Pleural Disease," by Vernon A. Vix, M.D.

1. c
2. a, b, c
3. c
4. a, c

The following are answers to the CME quizzes that appeared in the February, March and April issues of THE JOURNAL. Effective immediately, the answers to each month's CME quiz will be published in the following month's issue of THE JOURNAL.

February: "Hypoglycemia in the Diabetic," by Charles M. Clark, M.D.

1. False
2. True
3. False
4. True
5. True
6. True
7. True
8. False
9. True
10. True
11. True
12. True
13. True
14. False
15. True

March: "Facial Paralysis: Diagnosis & Treatment," by Laverne B. Tubergen, M.D.

1. False
2. True
3. False
4. False
5. True
6. True

April: "Exercise-Induced Asthma," by L. Craig Miller, M.D.

1. False
2. False
3. True
4. All of the above
5. a. True
 b. True
 c. True
 d. True
 e. False
6. True

Complete this form to obtain verification for one hour of Category 1 AMA CME credit.

Answer sheet for Quiz: (Neonatal Seizures)

1. a b c d e
2. a b c d
3. a b c e
4. a b c d
5. a b c d
6. a b c d
7. a b c d e
8. a b c d
9. a b c d
10. a b c

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in the next issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before July 10, 1979, to the address appearing at the top of preceding page.

OBITUARIES

Charles R. Alvey, M.D.

Dr. Alvey, 62, a Muncie general practitioner, died April 16 at Ball Memorial Hospital in Muncie.

He was a 1945 graduate of the Indiana University School of Medicine. He served in the Army during World War II and in the Air Force as a flight surgeon from 1953-55.

Dr. Alvey began practicing in Muncie in 1948 and remained there except for brief periods while serving in the Air Force, as an industrial physician with the Ford Motor Company in Detroit, and later with General Electric in San Jose, Calif.

He was a former Muncie city health officer and a former medical examiner for the Federal Aviation Administration. He was a member of the American Academy of Family Physicians and served the ISMA as its chairman of the Section on General Practice. He also had served with two ISMA commissions.

Carl H. Bendler, M.D.

Dr. Bendler, 75, formerly of Gary, died in Sanford, Florida, March 29.

He had left Gary nine years ago to retire in Florida but continued to practice there. He had been a Gary physician from 1930 until 1968.

Dr. Bendler was a 1929 graduate of the University of Louisville School of Medicine.

Virgil McCarty, M.D.

Dr. McCarty, 79, an Evansville orthopedic surgeon, died April 8 at Welborn Memorial Hospital, Evansville.

A 1924 graduate of the Indiana University School of Medicine, he was a surgeon for 52 years at Gibson General Hospital, Princeton.

Dr. McCarty was a member of the Gibson County Medical Society, serving as its delegate in 1959, 1967, 1975 and 1976. He became a senior member of the ISMA in 1970 and was enrolled in the 50-Year Club in 1974.

Dr. McCarty was a fellow of the American College of Surgeons and of the International College of Surgeons.

Rent, Lease or Buy...

Everything you need for your office at one place . . .
Mix and match furnishings and accessories to suit your budget, and your good taste.



BFC

BUSINESS FURNITURE CORPORATION
101 S. PENN. ST. • INDIANAPOLIS, IND. 46204 • PHONE: 317 631-1400

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

ANESTHESIOLOGY Resident Training Program seeks qualified Indiana applicants. Experience in general practice or primary care preferred. Inquire: Lucien E. Morris, M.D., Department of Anesthesia, Medical College of Ohio, Caller Service #10008, Ohio 43699.

PHYSICIAN ASSISTANT: Board certified, licensed, 3 years primary care experience, desire relocation to Indiana, rural or urban. Please call 606-441-0038 after 6 p.m.

PSYCHIATRIST—Progressive CMHC in rapidly growing four-county catchment area headquartered in university city will have an opening for a psychiatrist in June 1979. The position will include both inpatient and outpatient work. Salary is competitive, with excellent fringe benefits including liability insurance. Call or write James Youngman, M.D., or Personnel Officer, South Central Community Mental Health Center, 640 S. Rogers, Bloomington, Ind. 47401. Tel: (812) 339-1691.

FOR SALE: 3-bedroom home with doctor's office, including 1 exam room, consultation room, waiting room; 2 fireplaces, 3½-car garage located on 1 acre on busy street. Tel: (3171 888-2205.

IMMEDIATE OPENING for full-time (40-hour week) Indiana licensed physician in training center for mentally retarded. Fringe benefits include health and life insurance, excellent retirement program, accumulative sick and vacation leave. Rotate night and weekend "call" with four other physicians compensated by time off. (Will consider one-half time, mornings only.I For further information or application, contact George Smith, Personnel Director, Fort Wayne State Hospital and Training Center, 4900 St. Joe Road, Fort Wayne, Ind. 46815. Tel: (219) 485-7554.

OCCUPATIONAL MEDICINE—Medical Director for the appliance component business division of General Electric Co. headquartered in Ft. Wayne, Ind. Directing headquarters staff of 7 nurses, 2 part-time physicians, technician, secretary and 3 industrial hygienists plus brand new computerized health/hygiene/safety recordkeeping system and administrator for same. Also have policy/administative responsibility for 14 additional plants through Midwest and South. Salary and benefits excellent; Ft. Wayne 200,000 pop. and great place to raise a family. Industrial experience helpful but not essential. Equal Opportunity employer. Contact E. B. O'Hora, Manager, Professional Relations, c/o General Electric Co., Ft. Wayne, Ind. 46804.

LOCUM TENENS—**EMERGENCY MEDICINE**—available in our 100 hospitals; monthly scheduling is flexible and according to your preferences; malpractice is paid, excellent hourly income according to your flexibility and hours worked. Call toll free 1-800-325-3982, ext. 220 for details.

MICHIGAN CITY, INDIANA—Emergency Department Director; flexible scheduling. Excellent income—$57,000 to $65,000. Paid malpractice insurance. Contact T.P. Cooper, M.D., 970 Executive Parkway, St. Louis, Missouri 63141, or call toll free 1-800-325-3982.

CHICAGO AREA EMERGENCY DEPARTMENT DIRECTORSHIP. Progressive 250-bed hospital in community situated outside congested metropolitan area. Emergency Medicine experience and ACLS certificate, or comparable proficiency level required. Excellent minimum guarantee with directorship bonus, flexible rotations, and superb malpractice program. To inquire, call Bill Salmo at 1-800-325-3982, toll free.

OPPORTUNITIES FOR PHYSICIANS—There are current openings among the Indiana State Hospitals at various locations throughout the State for psychiatrists and physicians of other specialties, at most experience levels. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, Ky. 42071 or call (collect) (502) 753-9772. Forrest is retained by the Indiana Department of Mental Health.

CHICAGO AREA EMERGENCY MEDICINE PRACTICE. Progressive 250-bed hospital in community situated outside congested metropolitan area. ACLS certificate or comparable proficiency level required. Excellent minimum guarantee, flexible rotations, and superb malpractice program. For details, call Bill Salmo at 1-800-325-3982, toll free.

PHYSICIAN WANTED: Residency-trained, board-certified Family Physician to join well established four-man family practice group. Spacious office building across the street from well equipped hospital. Small midwest town in proximity to Indianapolis and Chicago. If interested, please reply to Kenneth J. Ahler, M.D., 1103 E. Grace St., Rensselaer, Ind. 47978.

FOR RENT July 1, 1979-July 1, 1980. Large 6-bedroom home on acreage; 3 full baths, 2-car garage, finished basement, study, screened porch, stables. Pike Township schools. Tel: (3171 873-4968.

PHYSICIAN WANTED—Oppartunity exists far young family proctitioner to set up affice in new medical camplex, westside Indianopalis, 38th St. at I-465. My office presently has oversized waiting room and business affice allawing far second office on opposite side and sharing of overhead expenses. Call 317-247-0300, 8:30-4:30 except Wednesday and Saturday until noan anly.

PHYSICIANS' DIRECTORY

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

NEUROSURGERY

By Appointment — Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurological Surgery

1815 North Capital Avenue — Indianapolis 46202

By appointment only — Phone 317-353-6800

BIO MEDICAL LABORATORY
5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Training for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. — MALCOLM S. SNELL, M.D.

OPHTHALMIC PLASTIC SURGERY

Robert D. Deitch, M.D., F.A.C.S.

Fellow of the American Association of Ophthalmic Plastic and Reconstructive Surgery

St. Francis Medical Arts Building
1500 Albany Street Suite 801
Beech Grove, Indiana 46107

PHONE ANSWERED 24 HOURS (317) 783-6187

INTERNAL MEDICINE

Offices for the doctors listed below are located at 3130 N. Meridian St., Indianapolis 46208; the switchboard number is 317-927-1221.

MERIDIAN MEDICAL GROUP

CARDIOLOGY
Richard M. Nay, M.D.
Warren E. Coggeshall, M.D.
Richard R. Schumacher, M.D.
William C. Elliott, M.D.

HEMATOLOGY—ONCOLOGY
Laurence H. Botes, M.D.
William M. Dugan, M.D.
James E. Schraeder, M.D.
Frank A. Workman, M.D.
Debarah S. Pravisor, M.D.
Pediatrics

METABOLISM AND ENDOCRINOLOGY
William M. Halland, M.D.

GASTROENTEROLOGY
Robert D. Pickett, M.D.
B. T. Maxam, M.D.
Lee G. Jordan, M.D.
Martin P. Meisenheimer, M.D.

INTERNAL MEDICINE
Hunter A. Soper, M.D.
Douglas H. White, Jr., M.D.
Michael B. DuBais, M.D.
Nephralogy
Michael P. Bubb, M.D.
Robert L. Iversan, Jr., M.D.
Critical Care
Michael Zeckel, M.D.
Infectious Diseases

INFECTIOUS DISEASES
Thomas G. Slama, M.D.

NEUROLOGY
Norman W. Oestrike, M.D.
Charles Rehn, M.D.

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Ahearn, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegeman, M.D.
Douglas F. Johnstone, M.D.
LeRay H. King, Jr., M.D., FACP

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capitol, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

PHYSICIANS' DIRECTORY

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
PAUL M. FLANAGAN, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

DAVID L. PHILLIPS, M.D.
JOHN J. SAALWAECHTER, M.D.
BEN H. PARK, M.D.

Individualized Treatment for Alcoholism

KOALA CENTER



1711 Lafayette Avenue
Lebanon, Indiana 46052

(317) 482-3711

HAND SURGERY

By appointment **Phone 317-783-1319**

VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.
Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery

3530 S. Keystone, Suite 305 **Indianapolis 46227**

CARDIOLOGY

WILLIAM K. NASSER, M.D.
MICHAEL L. SMITH, M.D.
CASS A. PINKERTON, M.D.

Cardiology and cardiac catheterization

8402 Harcourt Road, Room 413 **Indianapolis 46260**
St. Vincent's Professional Building **(317) 257-9316**
Physician Referral Only

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.

Certified: American Board of Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons
Specializing in Colon and Rectal Surgery

214 Sherlond Building
105 East Jefferson Blvd. **Sauth Bend, Ind. 46601**

PSYCHIATRY

GORDON T. BROWN, M.D.

Diplomate, American Board of Psychiatry and Neurology
Adult and Adolescent
Psychotheropy, Consultation, Evoluation

Tel: (317) 923-3269
3266 North Meridian Street **Indianapolis 46208**

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique that we have over $4,000,000.00 in personal loans made to Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Colin G. Hozo
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis Morris Plan

ADVERTISERS IN THIS ISSUE

June 1979 Vol. 72 No. 6

American Fletcher National Bank 387
Beltone Electronics Corporation 422
Blue Cross-Blue Shield 379
Brown Pharmaceutical Co., Inc. 391
Burroughs Wellcome Co. 386
Business Furniture Corporation 486
Campbell Laboratories, Inc. 382
Commercial Announcements 487
Dave Waite Leasing 413
Eli Lilly and Company 483
Giganti, Inc. 399
Hanger Prostheses 382
Immke Circle Leasing, Inc. 481
Indiana Medical Bureau 402
Loma Linda Foods 377
McClain Car Leasing, Inc. 392
Mead Johnson Pharmaceutical Div. 393-396
Medical Protective Company 420
Merck Sharp & Dohme 398
Merrell-National, Inc. ..382, 383, 406, 407, 408
Morris Plan 490
Pharmaceutical Manufacturers Assn. 400, 401
Physicians' Directory 488
Professional Careers Institute 480
P&SLI 482
Roche Laboratories Covers
Smith, Kline & French 405
S-Tek Computer Services, Inc. 403
Townsend, J. Russell and Associates 381
Upjohn Company 384
Warner/Chilcott 421

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

July 1979 • Vol 72 • No.7

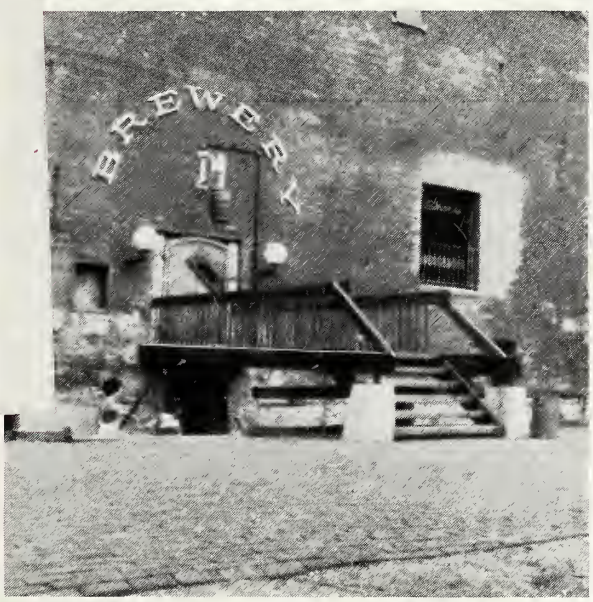
The JOURNAL

INDIANA STATE MEDICAL ASSOCIATION

INDIANA STATE MEDICAL
ASSOCIATION. JOURNAL









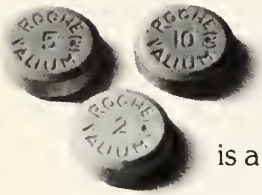




LIBRARY
U.C. SAN FRANCISCO
JUL 31 1979

The Library, Acquisitions Dept.
SAN FRANCISCO, CA 94143

A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own. Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium® (IV)
diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

a prudent choice in psychic tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis

The English title of Agatha Christie's mystery, sold in America as *Ten Little Indians,* is *And Then There Were None.* This is also an apt description of the ultimate effect of time on each of our medical classes.

Shown on this page, for example, is the 45th Reunion of the Class of 1903 of the Medical College of Indiana. The photograph was taken on the front steps of Emerson Hall on May 5, 1948, and shows, from left, top row: J. W. Strange, H. J. Weil, C. N. Combs, E. F. Kratzer and R. D. Varner; middle row: H. H. Elmore, R. H. Wagoner, K. I. Jeffries, F. S. Crockett and W. S. Coreman; bottom row: E. B. Moser, A. H. Miller, P. S. Johnson, E. F. Kiser and G. C. Newby.

These 15 survivors of a class of 74 would now be near the century mark, if still living.

Dr. Edgar F. Kiser (bottom row of class photo, 5th from right) was an enthusiastic collector and historian, who taught the subject of medical history at I. U. School of Medicine. His contribution to the Museum (via his daughters) was described in this column in March 1976.



The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Vol. 72, No. 7
JULY 1979

USPS 284-440
ISSN 0019-6770

Editorial & Advertising Office:
3935 N. Meridian St.,
Indianapolis, Ind. 46208

EDITOR
Frank B. Ramsey, M.D.
MANAGING EDITOR
Martin T. Badger
BUSINESS MANAGER
Donald F. Foy

CONSULTING EDITORS
Charles A. Bonsett, M.D.
A. W. Cavins, M.D.
Samuel R. Mercer, M.D.
Lall G. Montgomery, M.D.
W. D. Snively, M.D.
I. W. Wilkens, M.D.

EDITORIAL BOARD
Elton Heaton, M.D.
Rodney A. Mannion, M.D.
(Terms expire Dec. 31, 1979)
Alvin J. Haley, M.D.
Wei-Ping Loh, M.D.
(Terms expire Dec. 31, 1980)
Steven C. Beering, M.D.
Paul S. Rhoads, M.D.
(Terms expire Dec. 31, 1981)

THE JOURNAL of the Indiana State Medical Association is published monthly in the interests of the medical profession of Indiana. No copyright claimed. Copyright rests solely with authors, who are responsible for statements made in their articles. Views expressed do not necessarily reflect the opinions of the editors. Scientific and editorial contributions are accepted for exclusive publication, subject to editorial requirements.

All issues since 1967 available on microfilm from University Microfilms, Inc., 300 N. Zeeb Rd., Ann Arbor, Mich. 48106. Indexed in Index Medicus and Hospital Literature Index.

Advertising rates and data available on request. Representative for national advertising: State Medical Journal Advertising Bureau, Inc., 711 South Blvd., Oak Park, Ill. 60302.

Publication deadline: 1st day of month preceding month of issue.

Subscriptions: $14 per year, USA; $16, Canada; $17, foreign; $12, libraries; $10, senior ISMA members; $8, members; except for special issues, single copies not available. Subscriptions renewable only in January and July.

Second-class postage paid at Indianapolis Ind. and additional mailing office.

SCIENTIFIC ARTICLES

521 **Status of Adjuvant Therapy for Renal Cell Cancer (Part 1, Urologic Neoplasia Series)—**
Arthur Sagalowsky, M.D.

525 **The Diagnosis of Hyperlipidemia in Infancy and Childhood—**
Harold E. Stadler, M.D.

526 **Epstein-Barr Mononucleosis in Older Persons—**
Eric L. Dyer, M.D.

528 **The Five Fingers of Cardiology—**
R. Joe Noble, M.D.

530 **Cerebrospinal Fluid Lactic Acid: A Valuable Aid in the Diagnosis of Septic Meningitis—**
Gregory Ellis, M.D.

SPECIAL FEATURES

496 **Editorial Notes**

504 **Guest Editorial: Why? Because!**

506 **Guest Editorial: Let's Stop Progress**

508 **Guest Editorial: You Dig Sixteen Tons . . .**

510 **Commentary: Can Comprehensive NHI Work?**

535 **Court Action**

536 **ISMA Insurance Company Possible**

DEPARTMENTS, MISCELLANEOUS

491 **Medical Museum Notes**

494 **What's New?**

515 **Future File**

516 **Cancer Corner**

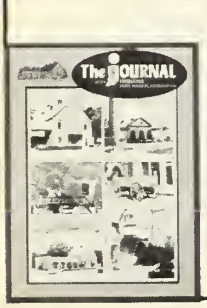
518 **Auxiliary Report**

520 **There's a Word for It**

532 **News Notes**

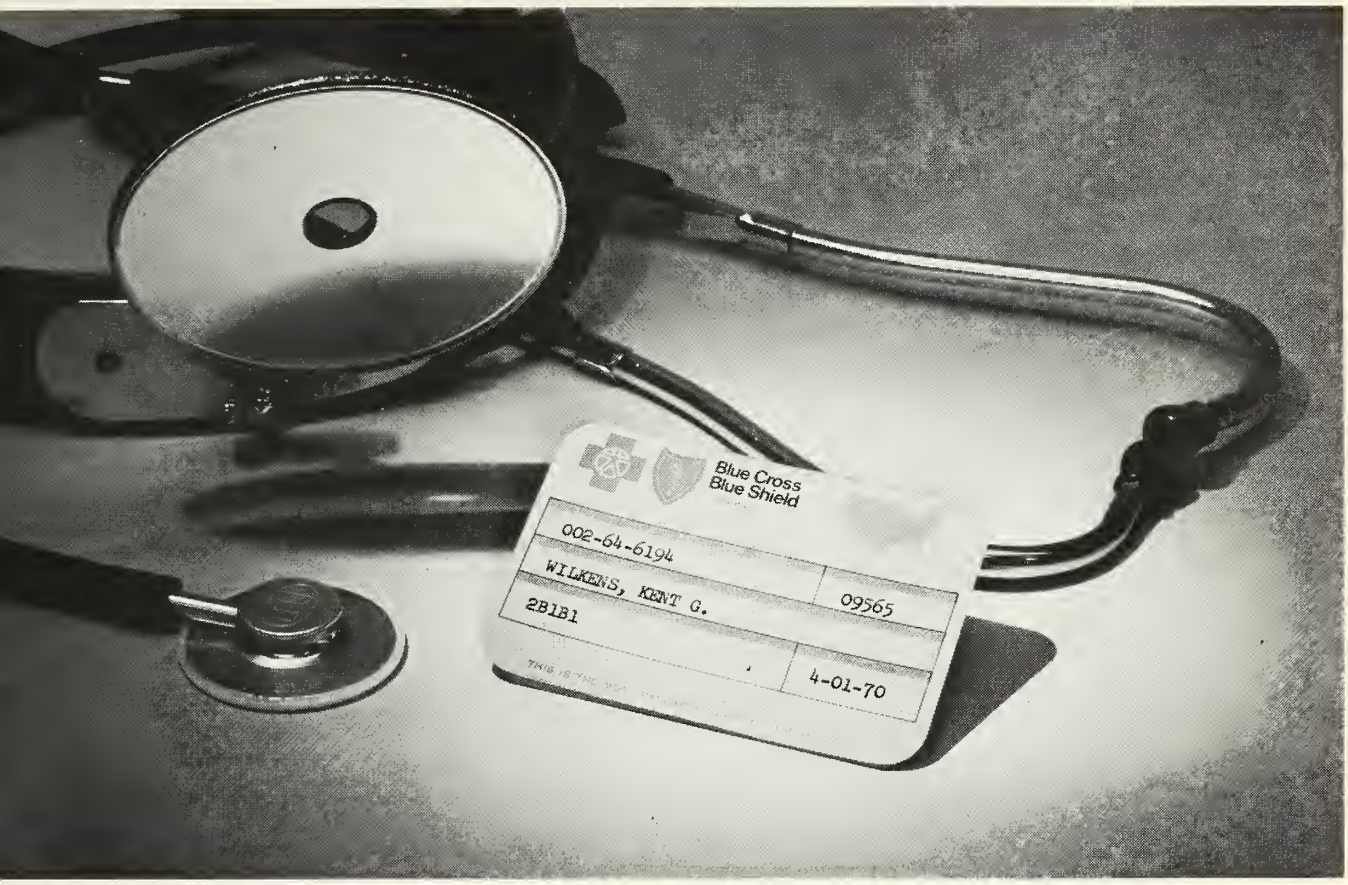
540 **Obituaries**

ABOUT THE COVER



The 20-acre "100 Center Complex" in Mishawaka (St. Joseph County) houses more than 40 specialty shops in the original buildings of the old Kamm's Brewery operation. And on July 14-15, the shopping center will host the 8th annual Kamm's Brewery Arts and Crafts Festival. If you're in the South Bend-Mishawaka area, you'll find the 150-year-old "brewery" center in the 700 block of Lincolnway West (U.S. 33).

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- One full year in-hospital care
- 100% semi-private room and hospital extras
- Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy
- $250,000 Major Medical Benefits

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Mel Torbeck, Mass Marketing Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4340.

We believe in being better

Blue Cross
Blue Shield
of Indiana

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark. Nat'l Assn. of Blue Shield Plans

WHAT'S NEW?

Smith Kline & French announces FDA approval to market "Selacryn" (ticrynafen), the first antihypertensive diuretic prescription drug to also lower serum uric acid levels. "Selacryn" is indicated for step-one management and long-term control of hypertension. FDA approval comes after a four-year worldwide clinical investigation.

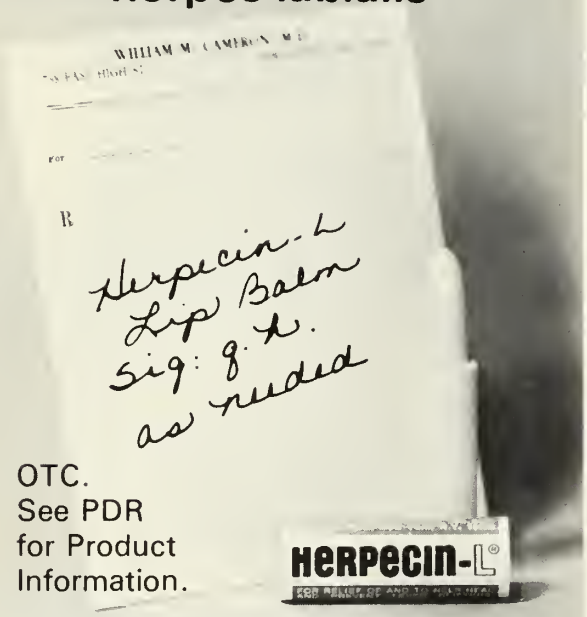
* * *

Searle Health Physics Services offers a new dosimeter card, Nuclibadge®, designed to be carried in a wallet by personnel who do not require frequent radiation monitoring but who could be accidently exposed in emergency situations. If radiation exposure is suspected, the card may be returned to Searle at any time for evaluation.

* * *

Stuart Pharmaceuticals is introducing a new antimicrobial for pre-operative skin preparation. Hibitane® Tincture (chlorhexidine gluconate), 0.5% in 70% isopropanol, with skin colorant, is a clear red liquid that is widely bactericidal, rapid and persistent. Very few adverse reactions have been reported.

Dx: recurrent herpes labialis



OTC.
See PDR
for Product
Information.

For samples, write Dept. F at:

CAMPBELL LABORATORIES, INC.
P.O. Box 812, FDR, N.Y., N.Y. 10022

"Herpecin-L" Lip Balm is available at all Haag Drug Stores and other select pharmacies.

Hewlett Packard announces a new obstetrical telemetry system that allows expectant mothers to move freely about the hospital while both the unborn baby's heart rate and the mother's contractions are continuously monitored. This allows the mother more mobility before going to the delivery room. It also reduces the amount of instrumentation cables in the delivery room while providing continuous monitoring during labor.

* * *

Travenol Laboratories announces that more of Travenol intravenous solutions will be marketed in collapsible and disposable plastic Viaflex® containers. This move will result in almost doubling the number of solutions in the plastic containers. The wide range of premixed solutions in 500 ml and 1,000 ml sizes reduces the instances in which solutions must be mixed, thus saving time and avoiding errors and contaminations.

* * *

McNeil Laboratories announces that Tolectin® tolmetin sodium is now approved for use in treating osteoarthritis. It also is indicated for rheumatoid arthritis, and is the only nonsteroidal anti-inflammatory drug approved by the FDA for juvenile rheumatoid arthritis.

* * *

Plastocon™ has a line of odor controllers that can neutralize a variety of offensive odors. Its commercial odor controller is a small electric appliance featuring a dial that lets you select strength from 1 to 10; it houses a replaceable cartridge that lasts from 25 days to a full year depending on the setting used. Plastocon also carries two disposable models that feature dial controls to regulate output but operate without electricity or batteries.

* * *

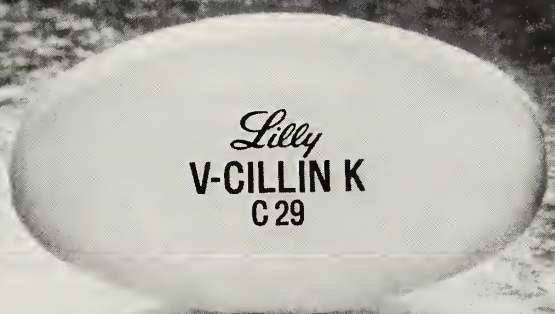
The 3M Company has an elastic bandage that is self-sticking and does not require clips or pins. It will stay in place when moist. It is useful as a support bandage and may be used as an overwrap, or to hold electrodes during stress testing, or to hold cold packs in place. It may be cut to the exact length required and does not unravel or shred. The name is Coban Bandage.

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

V-Cillin K®

penicillin V potassium

is the most widely prescribed brand of oral penicillin



Tablets
125, 250, and 500 mg*
Oral Solution
125 and 250 mg*/5 ml

V-Cillin K®
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. [102175]

***Equivalent to penicillin V.**

Additional information available to the profession on request.

Lilly

Eli Lilly and Company
Indianapolis, Indiana 46206

900416

EDITORIALS

Family Practice Residents Complete Teacher-Training

Eleven family practice residents at Ball Memorial Hospital in Muncie have just received M.S. degrees in Family Practice Education. The residency program, first of its kind in the country, is conducted in cooperation with Ball State University.

Dr. Ross Egger is director of the family practice residency program at Ball Memorial Hospital. William Bock, Ph.D., is associated with him in the unique educational project.

The graduates comprise the first class of residents to complete the pioneering educational endeavor. The course of academic work is carried at the same time the usual training activities of the clinical residency are accomplished. Academic experience includes at least 45 quarter credit hours. Practice teaching in the university and a research project with a thesis requirement are part of the formal education.

Family practice residents at Ball Memorial Hospital are not obligated to follow the education program. About half of them have done so in the past, and those who are now in active practice testify to the value of the teaching training as part of clinical training. Dr. Egger explained, "We are not in the business of preparing 'academicians' for medical school teaching and the like, but rather preparing family physicians for their role as teachers of patients, families and groups in the community."

All the clinical acumen, medical knowledge, and expertise that an active practitioner may have at his command are of little practical use unless the physician is able adequately to convey to the patient the knowledge necessary for recovery. Teaching skills are as necessary in the doctor's office as they are in an educational situation. All doctors are teachers and should be instructed in teaching methods just as they are in medicine.

Medic Alert Foundation Lists 27 Hidden Conditions

Medic Alert Foundation International has published a booklet which lists 27 categories of hidden medical conditions. These range from endocrine, nutritional and metabolic diseases through diseases of blood and bloodforming organs and including diseases of the nervous system and circulatory system. The Medic Alert emblem is recommended to all patients with hidden diseases. Lives may be saved when such patients are unable to give a medical history and require emergency treatment. Copies of the booklet entitled "Why Medic Alert?—Index and Prevalence of Hidden Medical Diseases or Problems" may be obtained by writing the Foundation at P.O. Box 1009, Turlock, Calif. 95380.

CONTINUED ON PAGE 503

THE INDIANA STATE MEDICAL ASSOCIATION

3935 N. Meridian, Indianapolis 46208—Telephone 925-7545

1979 Annual Meeting—Oct. 13-17—Indianapolis

OFFICERS FOR 1978-79

President—Arvine G. Papplewell, 3530 S. Keystone, Indianapolis 46227

Treasurer—Joseph F. Ferrara, 111 S. Water St., Franklin 46131

Assistant Treasurer—Douglas H. White, 3524 N. Meridian, Indianapolis 46208

Executive Committee—Paul W. Haltzman, Chairman; Arvine G. Papplewell, Joseph F. Ferrara, Douglas H. White, John W. Beeler, Eli Gaadman, Alvin J. Haley, Martin J. O'Neill, Members

Speaker of the House—Lloyd L. Hill, 302 N. Duke St., Peru

Vice Speaker—Lawrence E. Allen, 2009 Brown St., Anderson

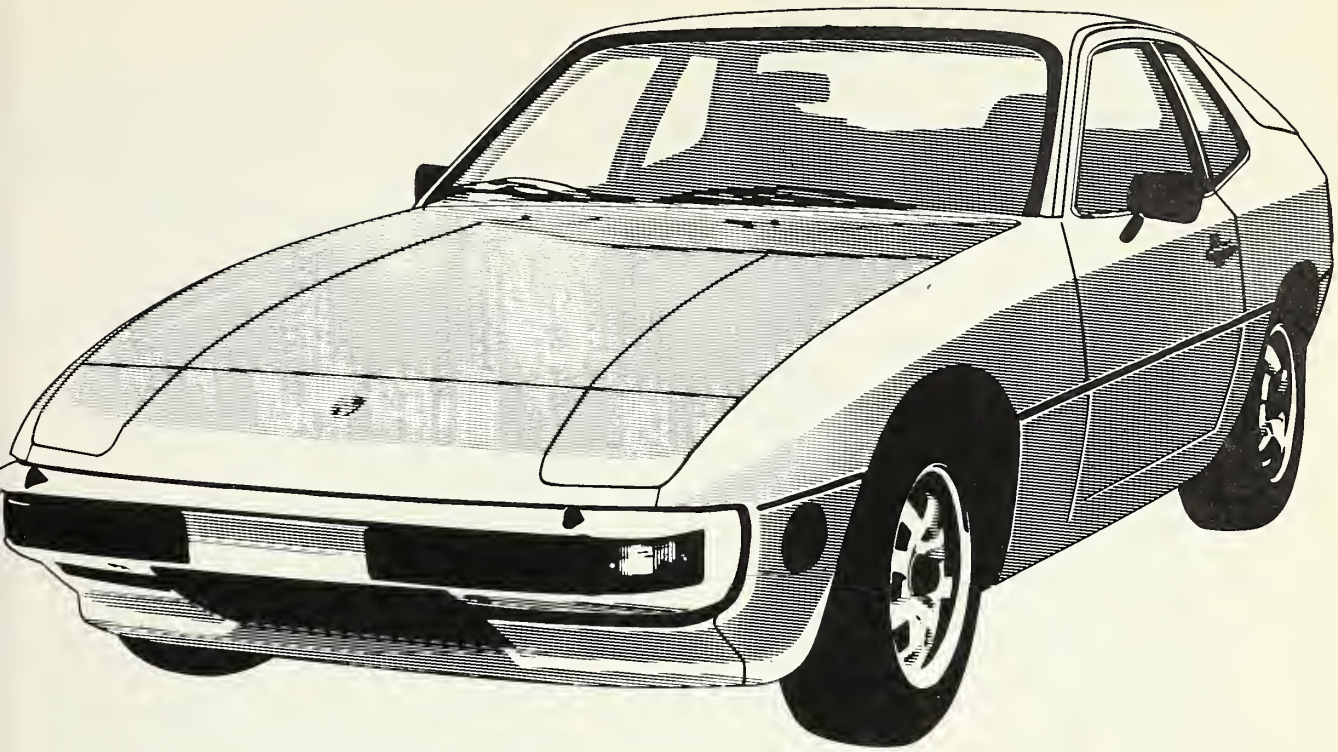
Executive Director—Mr. Donald F. Fay

TRUSTEES

District	Term Expires
1—John A. Bizal, Evansville	Oct. 1980
2—Harold M. Manifold, Bloomington	Oct. 1981
3—Thomas A. Neathamer, Jeffersonville	Oct. 1979
4—Howard C. Jackson, Madison	Oct. 1980
5—Paul Siebenmargen, Terre Haute	Oct. 1981
6—Davis W. Ellis, Rushville	Oct. 1979
7—Donald C. McCallum, Indianapolis	Oct. 1980
7—John G. Pantzer, Indianapolis	Oct. 1981
8—Jack M. Walker, Muncie	Oct. 1981
9—John A. Knote, Lafayette	Oct. 1979
10—Martin J. O'Neill, Valparaisa	Oct. 1980
11—Herbert C. Khalouf, Marion	Oct. 1981
12—Alvin J. Haley, Fort Wayne (Chairman)	Oct. 1979
13—Donald S. Chamberlain, South Bend	Oct. 1980

ALTERNATES

District	Term Expire
1—E. DeVerre Gaurieux, Evansville	Oct. 197
2—Edgar R. Cantwell, Vincennes	Oct. 198
3—Richard G. Huber, Bedford	Oct. 198
4—Mark M. Bevers, Seymour	Oct. 197
5—William G. Bannan, Terre Haute	Oct. 197
6—Dan W. Hibner, Richmond	Oct. 198
7—I. E. Michael, Indianapolis	Oct. 197
7—Gerald J. Kurlander, Indianapolis	Oct. 197
8—Ted S. Dales, Middletown	Oct. 197
9—Max N. Haffman, Covington	Oct. 198
10—Leonard W. Neal, Munster	Oct. 198
11—Fred C. Poehler, La Fontaine	Oct. 198
12—Franklin A. Bryan, Fort Wayne	Oct. 198
13—John W. Luce, Michigan City	Oct. 197



Why lease an ordinary car when you can lease a Porsche 924?

The Porsche 924 can reach 60 mph in slightly over 11 seconds from a standing start, without breathing hard. Not that you'll ever need that kind of performance muscle, but it's nice to know that it's there.

Now you can lease a Porsche sports car for the 1980s today. For rates comparable to those of other cars with fatter dimensions. And thinner bloodlines. With all the options you'll ever want, including a snug-fitting removable sun roof.

If you're looking for an astonishingly well-engineered sports car that is the result of continuous testing and refinement, Porsche is for you. And if you think sports cars are lacking in luxury, one test-drive in a Porsche 924 will change your mind.

Don't lease a car. Lease a new Porsche 924. And give yourself a whole new lease on driving.

PORSCHE+AUDI

NOTHING EVEN COMES CLOSE

See your nearby Porsche Audi dealer.
Ask about the special low rates in effect until Aug. 30, 1979



Tenuate® ℞
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

8-3921 (Y587A)

Overweight may not always be simple... complications can develop.*

Complicated or not...

Tenuate® Dospan® ℂ℣
(diethylpropion hydrochloride NF)
75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

Merrell

For prescribing information see opposite page.

new 600 mg tablets

Motrin®

ibuprofen, Upjohn



More convenient for some of your patients.

Now there are three Motrin tablet strengths to choose from–
600 mg, 400 mg, and 300 mg

Upjohn The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A.

© 1979 The Upjohn Company

J-6999-4



Tagamet®
brand of
cimetidine

How Supplied:
Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

Important data on the pain of acute cystitis:

In 87% of patients studied (303 of 349), Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain

for the pathogens

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

Before prescribing, please consult complet
uct information, a summary of which follow

Indications: In adults, urinary tract infectio complicated by pain (primarily pyelonephri pyelitis and cystitis) due to susceptible org (usually *E. coli, Klebsiella-Aerobacter, Staph coccus aureus, Proteus mirabilis,* and, less quently, *Proteus vulgaris*) in the absence o obstructive uropathy or foreign bodies. Not **fully coordinate *in vitro* sulfonamide sensit tests with bacteriologic and clinical respon aminobenzoic acid to follow-up culture me increasing frequency of resistant organisms the usefulness of antibacterials including s fonamides.** Measure sulfonamide blood lev variations may occur; 20 mg/100 ml shoul maximum total level.

Contraindications: Children below age 12; fonamide hypersensitivity; pregnancy at te during nursing period; because Azo Gantan tains phenazopyridine hydrochloride it is c dicated in glomerulonephritis, severe hepa uremia, and pyelonephritis of pregnancy w disturbances.

Warnings: Safety during pregnancy not est Deaths from hypersensitivity reactions, agr tosis, aplastic anemia and other blood dys have been reported and early clinical signs throat, fever, pallor, purpura or jaundice) n dicate serious blood disorders. Frequent C urinalysis with microscopic examination ar ommended during sulfonamide therapy.

Precautions: Use cautiously in patients wit paired renal or hepatic function, severe all bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in wh dose-related hemolysis may occur. Maintai adequate fluid intake to prevent crystalluri stone formation.

Adverse Reactions: *Blood dyscrasias* (agra ulocytosis, aplastic anemia, thrombocytop leukopenia, hemolytic anemia, purpura, h thrombinemia and methemoglobinemia); a *reactions* (erythema multiforme, skin erup Stevens-Johnson syndrome, epidermal nec urticaria, serum sickness, pruritus, exfolia dermatitis, anaphylactoid reactions, perior edema, conjunctival and scleral injection, sensitization, arthralgia and allergic myoca *G.I. reactions* (nausea, emesis, abdominal hepatitis, diarrhea, anorexia, pancreatitis stomatitis); *CNS reactions* (headache, per neuritis, mental depression, convulsions, hallucinations, tinnitus, vertigo and insom *miscellaneous reactions* (drug fever, chills nephrosis with oliguria and anuria, periarte nodosa and L. E. phenomenon). Due to ce chemical similarities with some goitrogens uretics (acetazolamide, thiazides) and oral glycemic agents, sulfonamides have caused instances of goiter production, diuresis an glycemia. Cross-sensitivity with these agen exist.

Dosage: Azo Gantanol is intended for the a painful phase of urinary tract infections. U *adult dosage:* 2 Gm (4 tabs) initially, then (2 tabs) B.I.D. for up to 3 days. If pain pe causes other than infection should be sou After relief of pain has been obtained, con treatment with Gantanol (sulfamethoxazol be considered.

NOTE: Patients should be told that the ora dye (phenazopyridine HCl) will color the u

Supplied: Tablets, red, film-coated, each ing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and

ROCHE

Roche Laboratories
Division of Hoffmann-La Ro
Nutley, New Jersey 07110

EDITORIALS

FDA Action on Furosemide

The FDA is engaged in restraining three drug manufacturers from making and illegally distributing unapproved versions of the diuretic furosemide. Hoechst is the only manufacturer with FDA approval to market furosemide, which it sells under the trade name Lasix. The illegal examples of the drug are not bioequivalent and several instances have been reported in which patients with congestive heart failure have become worse when treated with the unapproved version of the drug. Some of the patients improved when changed to Lasix. The FDA continues efforts to control the sale of the unapproved drug products.

Safety Caps Work

The number of accidental aspirin poisonings in young children has been cut almost in half since the advent of "child-proof" aspirin containers. Safety packaging has reduced the incidence of accidental ingestion of baby aspirin by 45 to 55%. Nonbaby aspirin product poisonings are, however, down by from 40 to 45%, probably because nonbaby aspirin may be marketed without a safety cap.

'Alice in Wonderland' Syndrome

Children who suffer from recurrent headaches, or whose families have a history of migraine headaches, may experience sudden attacks of impairment of time sense, distortions of body image and visual hallucinations. These effects are known as the "Alice in Wonderland" syndrome and are reported in PEDIATRICS by Dr. Gerald S. Golden. Attacks occur when the child in conscious and alert. The pathophysiology of the condition is obscure. Diagnosis is important since the syndrome is not related to psychosis, drug abuse or seizures.

CPR for Medical Students

The members of the first year class at I.U. School of Medicine have been or will be given a basic course in cardiopulmonary resuscitation (CPR). This establishes the knowledge and skill necessary to perform CPR in all situations, especially those devoid of medical equipment. In some places, like Seattle, Washington, where CPR has been taught to half the population, deaths from sudden heart attacks have dropped dramatically.



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS

Operated by PHYSICIANS

For the protection of PHYSICIANS

P&SLI

Physicians & Surgeons Liability Insurance Co., Inc.
800 MacArthur Boulevard / Munster, Indiana 46321
219 836-2288

Guest Editorial

Why? Because!

FRANKLIN F. PREMUDA, M.D.
Merrillville

The labor foreman led his small labor force into the mill-yard and pointing to the ground ordered, "Dig here!" The men dug diligently until they had a three-foot-deep trench. The foreman came over and peered intently into the hole then brusquely said, "Cover it up." Puzzled, the men obeyed. The incident was repeated over and over in different areas of the yard, while the men became ever increasingly annoyed and irked to the point of mutiny where they could no longer tolerate such nonsensical orders without question or contumely.

Well, the world is full of cactus but you don't have to sit on them; so the men vehemently protested and succeeded in having the foreman replaced by another—a realistic and pragmatic man. Gathering the men about him, he pulled a sketch out of his pocket, spread it out on top of a nearby wooden crate and said, "Men, there's a broken, leaking pipe in this yard and we have to locate it so the repairmen can have a go at it. Here's a plan of the irregular path of the underground pipe; so let's dig here and there and we'll find it." Now that the cloud of mystery was lifted and they were now privy to the problem, the men dug with a constancy of purpose and uplifted morale till they succeeded.

Whenever the interrogative, "Why?" is counterbalanced with logic, full cooperation is usually assured. In this vein it must be mentioned that Dr. G. Peiffer, director of the Anesthesia Department at St. Margaret Hospital, Hammond, recently sent to the staff an excellent homily on the relationship between a patient's laboratory findings and the proper choice of an anesthetic in surgery and OB. Delineated in detail was shown which anesthetics were interdicted by certain laboratory abnormal results, thus protecting the patients, physicians and the hospital from episodes that might consequently prove awkward.

In summary, the facts were:

1. **CBC and U/A** within 72 hours of anesthesia. If patient is bleeding, the CBC must be done closer to the time of anesthesia.

2. **SMA 12** on all patients over age 14. While this procedure is profile in essence, it gives the anesthetist the following information:

- **BUN:** Rules in or out the administration of Penthrane, Ethrane and other renal-excreted drugs.
- **Enzymes and T. bilirubin:** Rules in or out administration of Halothane, and changes use of narcotics, muscle relaxants and other liver-metabolized drugs. It also gives one a handle on the street-drug user, ethanol user and the status of the chronically ill patient. The SGOT correlates well with the progress of hepatitis.
- **The Cholesterol Level:** If high, makes one think of arteriolar disease, thyroid dysfunction—and this alters one's anesthetic thinking.
- **The Total Protein:** Albumin levels indicate the status of tissue with chronic illness, and chronic blood loss. Gives an indication of calcium derangement. Helps to evaluate cardiac function, in terms of true calcium ion levels.

3. **Serum Potassium:** Alone or with serum electrolytes (S. Pot. alone is cheaper) on all patients on diuretics, e.g., anti-hypertensives, on all who have had diarrhea or been "enematized" frequently for x-rays, and diabetics. The S. Potassium must be at the 3.4 level or more. Correction of low levels must be done the week before surgery rather than attempting a massive correction the day before.

4. **Chest x-ray** within three months, or the day before surgery on all patients 16 years old; and on all smokers any age, and all patients including children with known respiratory problems.

5. **EKG** on all patients over age 40 and those younger who have exhibited cardiac problems in the past. All elective laparoscopies should have an EKG.

6. **Magnesium Levels:** On all known alcoholics. Important in preventing DTs and cardiac irritability.

WHY? Now you know!

The author is editor of the LAKE COUNTY MEDICAL NEWS, in which this editorial appeared in April 1979.

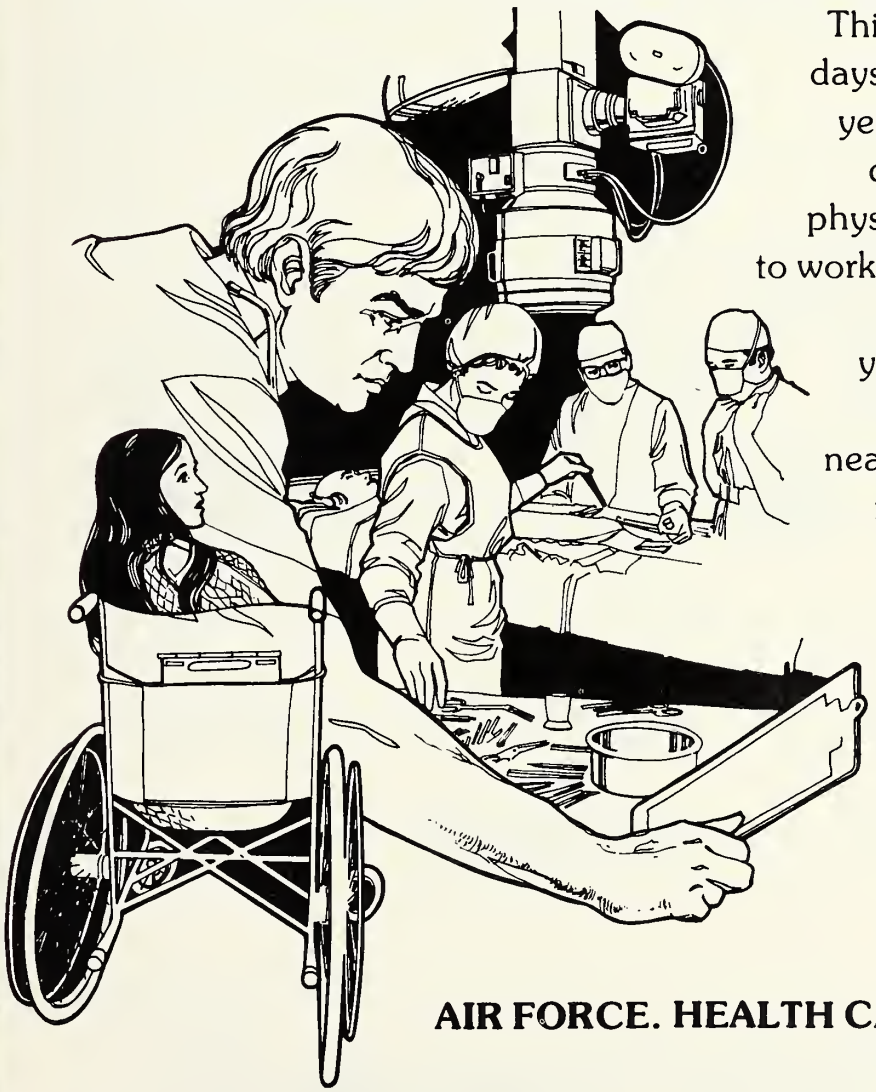
AIR FORCE MEDICINE

IT CAN MEAN A GREAT WAY OF LIFE FOR YOU.

Air Force medicine is practiced in hospitals and clinics around the world. From the 3 bed hospital at Zarogoza, Spain to the 1000 bed Wilford Hall medical complex in San Antonio, Texas, our health care system utilizes excellent equipment and highly trained and motivated staff personnel.

Air Force doctors practice medicine. Administrative duties and paperwork are kept to a minimum.

An excellent program of compensation and entitlements is available. This program includes 30 days of paid vacation each year, medical and dental care, and, for qualified physicians, an opportunity to work toward specialization.



Find out more about your future in Air Force medicine. Contact the nearest Air Force medical recruiter or call 1-800-523-5000 (800-362-5696 in Pennsylvania). We'll answer your questions promptly and without obligation.

AIR FORCE. HEALTH CARE AT ITS BEST.

AIR FORCE

Contact Captain Sam Redding
or MSgt Bob Reese
3919 Meadows Drive
Indianapolis, Ind. 46205
Phone: (317) 269-6164 Collect

Guest Editorial

Let's Stop Progress

FRANK COLE, M.D.
Lincoln, Nebraska

Heart-lung machines and tomography cost money, but they save lives, and that sounds good. But if you say they save lives, but they add to the rising cost of health care, it doesn't sound good at all. We could probably bring medical expenses way down if we reverted to turn-of-the-century methods, but to go back is unthinkable, and we are left with the whimsical thought that we might declare a moratorium on progress before the cost of keeping the patient alive is beyond his ability to pay. As everything costs more, so does health care, and our detractors are fond of pointing at us, even while we point to our innocence.

If inflation, with its octopus-like tentacles pointing every which way, will not stop, I am waiting patiently for someone to say that it is time to call a halt to progress, because new devices are coming to cost too much, that it is time to estimate the value of a human life in dollars and to realize that it is not infinite, and that going back to the kindly old doctor of long ago whom you called out in the middle of the night and then forgot to pay, may be a good idea.

I am not serious, but I'll bet a nonphysician a thousand miles from me is sitting at his typewriter as I sit at mine, and he is saying these things; and he means it.

The author is editor of the NEBRASKA MEDICAL JOURNAL, in which this editorial appeared in May 1979.

BEFORE YOU BUY OR LEASE, CONSULT WITH DAVE WAITE LEASING

At Dave Waite Leasing you will find all kinds of new automobiles and trucks on display for immediate delivery.

With rising automobile costs, before you buy, you must consider leasing whether it is for business or personal use. Consider that you can lease:

Gas-saving Compacts as little as $110* Sporty Intermediates as little as $130* Lease a Luxury car as little as $160*

*per month, for 36 month, (incl. tax)

Before you buy or lease, consult with us. Dave Waite Leasing is the leader and specialist.

Dave Waite Leasing

5199 N. Keystone/253-1501

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
1128 - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company

Guest Editorial

You Dig Sixteen Tons...

L. A. ARATA, M.D.
Shelbyville

**. . . and what do you get?
Another day older and
deeper in debt!**

So went the words of the ballad song so well sung by the talented Tennessee Ernie Ford a generation ago. He was telling the plight of the coal miners of an earlier generation enslaved by debt to the company store. By the time the lyrics became well known, the era of the mining town and company store was waning.

At an earlier date, or contemporary with the coal miners' slavery, there existed the sharecroppers' comparable slavery to the agricultural industry of the United States. Their plight might have been better understood if a great singer had popularized a ballad: **"You work another year and what do you get? Another year older and deeper in debt."**

The founders of our nation saw that the greatest dangers to freedom were government and debt. They tried to establish a small government that would not deprive the citizens of the freedom that had been purchased at so great a price. They seemed to realize that debt was the way to keep a man enslaved. Such seemed to be the situation with the coal miner and the sharecropper; unfortunately, such seems to be the situation with Americans today.

Debt equals slavery. The mortgage on my home takes precedence over my equity in the house. As long as I have the property mortgaged, I am enslaved to the mortgage holder for payments. On the larger scene, I am enslaved to our government. The IRS takes the first share of my earnings; I have left for me only what government decrees I may retain. The ever expanding greed of the "Pirates of the Potomac" keeps demanding ever increasing amounts of my earnings. The ever expanding debt being created by the Potomac Pirates has insured the slavery of unborn generations of Americans.

Where must we slaves look for freedom? Certainly the wrong place to look is toward Washington, for that is where our slavery comes from. Proposition 13 has opened the eyes of many Americans to the possibility of anti-slavery rebellion; it has provided a rallying point and leadership that we must keep alive. We must use its banner as a rallying symbol for the 1980 elections.

Oh, to be a talented singer like Ernie Ford! To be able to paraphrase and popularize his old ballad:

**We pay another thousand and what do we get?
Another day older and deeper in debt.
Mr. Devil, don't you grab me, I can't say Yes
'Cause I owe my soul to the IRS.**

1979 Membership Roster

The 1979 Membership Roster was published as a Supplement to the March issue of The Journal. It was printed from information carried on the computerized Master File of the Indiana State Medical Association.

Additional copies: Send check with order to The Journal, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Ind. 46208. Single copies to members, $5; all others, $15. Checks should be made payable to the Indiana State Medical Association.

The Lifeguard System
For people who live alone...

And need to know
Someone is always there.



A break-in. A bad fall. Heart attack. Fire. Stroke. A dangerous intruder. Each year, criminal acts medical emergencies, and serious household accidents take many hundreds of lives, and cause pain and suffering for thousands of others.

Now, a new low-cost electronic communications system helps people protect themselves and their family during life threatening emergencies, and also helps reduce fear for the safety of loved ones living alone. The Lifeguard System means greater peace of mind, and help, during those critical times when it's needed most. With the Lifeguard System, professional help can be summoned instantaneously—while family members are also alerted to the crisis. The Lifeguard System means no more fear about living alone.

The System

The Lifeguard System provides around-the-clock protection when at home. In an emergency, simply press one button on a small portable transmitter worn as a watch or necklace. From as far away as 200 feet, the transmitter immediately activates an easy-to-install communicator, which, using household telephone lines, instantly contacts our computer center, where specially trained operators will immediately summon aid. The real benefit of the Lifeguard System is that trained people respond to the call for help, not mechanical devices. Any information supplied—special police, fire or medical instructions—will be relayed to local authorities, neighbors, and members of the family. Within seconds, assistance is speeding on the way. With the Lifeguard System, someone is always there to help.

The System (with options)



Transmitter



Communicator—
Listening device



Computer Center
Monitoring



Smoke detector

FOR MORE INFORMATION AND A DETAILED BROCHURE CALL (317) 842-6600 OR WRITE:

Lifeguard Systems of Indiana
6801 Lake Plaza Drive, Suite A110
Indianapolis, IN 46220

LIFEGUARD™ SYSTEMS OF INDIANA

The Lifeguard System is approved for nation-wide use.

Commentary

Can Comprehensive NHI Work?

Senator Kennedy's intentions with his pet project—a national health insurance plan that is universal and comprehensive—might be most honorable but his plan does not appear very workable. President Carter's plan, on the other hand, seems more reasonable for it involves gradual implementation depending upon the government's ability to pay for such a plan.

It is our belief that most of the American people are not craving for a universal and comprehensive health plan, managed and mandated by the federal government.

The reasons for the American public's disenchantment with government-sponsored plans could be that most people have seen the failings of the Social Security System, the U.S. Postal Service and other government-sponsored programs. The Indian Health Service, a program which is solely administered by the federal government, is a clear example of bureaucratic bungling. Let's examine what has happened in three Western countries that have operated a nationalized health service on a federal level:

Canadian Health Care Plan—a comprehensive and universal plan put into place in 1971. This program was heavily subsidized by the federal government from its general revenues. Last year, the federal government withdrew from the Canadian Health Care Plan and gave the provinces the responsibility of financing health care. Now, each province has the prerogative of raising money in any way it wants. While the Canadian Plan is still the best of the lot, it is suffering increasing cost over-runs.

Like the United States, the watch word is cost containment and not improved patient care. Canadian physicians are reimbursed for almost everything they do, but they feel harassed by provincial governments. The very fact that the national plan was returned to the provinces indicates that a national health program of these dimensions is not a manageable proposition.

Australian NHI Plan—The developments in Australia have not been very encouraging either. With the change in political parties in 1972, a new national health program was launched in 1975. This NHI plan encompassed the entire population, without any voluntary contributions, and the program was financed from general revenue. Under this system, the patient has no choice of physician. By taking further voluntary insurance, a patient could insure receiving a particular physician of his choice. It is interesting to note that more than 50% of the Australian population opted for the choice of paying extra to have their own selected physician.

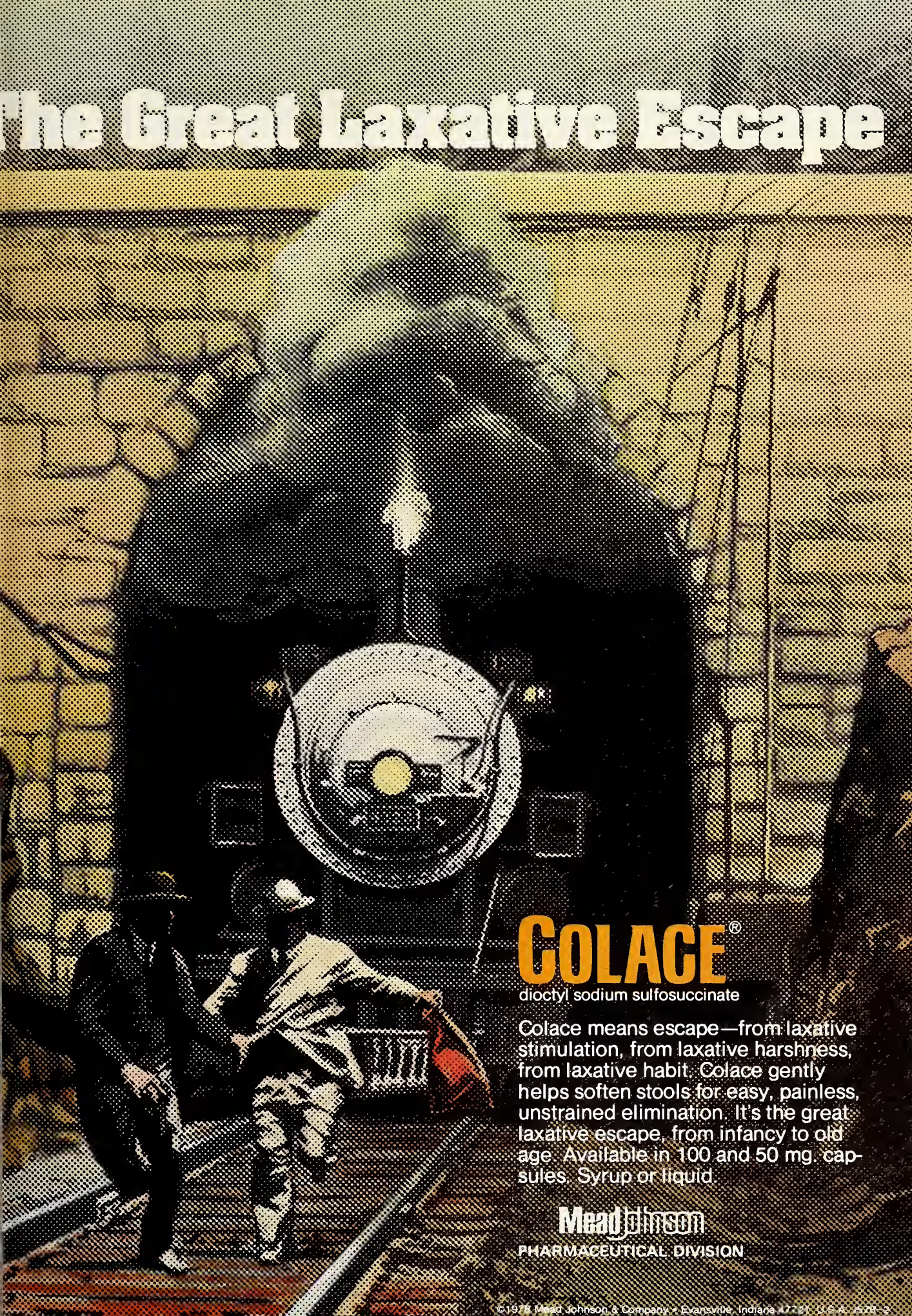
In one year, the Australian government learned that it has to levy a special tax of 2.5% of taxable income to finance the program. The maximum family contribution was limited to $300 per year. A person could elect not to participate in the government-sponsored NHI by purchasing private health insurance. Well! Yes, you guessed it right —over 65% of the Australian population elected to withdraw from the federal system. The mass exodus from the program has shaken the very foundations of NHI. A new plan was put into effect in November 1978. The high deductibles and co-insurance have their own limitations and the program does not look very promising.

British National Health Service—The plight of this program is too well known to merit further comment. As far as we know, there has been no improvement of services. If anything, the state of elective surgery has gone from bad to worse.

There are some lessons to be learned from these countries. First, no democratic government has the resources or administrative capabilities to meet the health needs of its population. Second, it is becoming more obvious that the population gets disillusioned with large and impersonal health insurance plans, especially when their freedom of choice is lost. Third, the health care demand is an open-ended loop and even the best laid plans cannot fulfill the public's expectations.

So, who wants a universal, comprehensive, tax-supported health care plan in the U.S.! It is interesting to note the proponents and their backgrounds.

Courtesy of ACTION IN PHARMACY, March 1979.



©1978 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. 7875-2

COMPATIBILITY



Eastern Tiger Swallowtail Butterfly
(Papilio glaucus)

Does it influence your choice of a peripheral/cerebral vasodilator*?

Vasodilan–compatible with coexisting diseases (e.g., glaucoma, diabetes)

Vasodilan has not been reported to affect the course of coexisting disease; it has not been reported to affect blood sugar levels or to raise intraocular pressure.

Vasodilan–compatible with concomitant therapy

Vasodilan has not been reported to affect the treatment of coexisting disease; it is compatible with such drugs as hypoglycemics and miotics.

Vasodilan–compatible with your total regimen for vascular insufficiency

Vasodilan can be a valuable adjunct in planning a total therapeutic program for vascular insufficiency.

Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:
Possibly Effective:
1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.
Final classification of the less-than-effective indications requires further investigation.

omposition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
asodilan injection, isoxsuprine HCl, 5 mg., per ml.

osage and Administration: Oral: 10 to 20 mg., three or four times daily.
tramuscular: 5 to 10 mg.(1 or 2 ml.) two or three times daily. Intramuscular dministration may be used initially in severe or acute conditions.

ontraindications and Cautions: There are no known contraindications to oral se when administered in recommended doses. Should not be given immediately ostpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

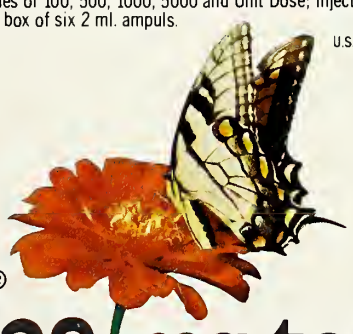
Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

U.S. Pat. No. 3,056,836



VASODILAN® 20-mg tablets

(ISOXSUPRINE HCl)

20 mg q.i.d. recommended dosage

Mead Johnson
PHARMACEUTICAL DIVISION

© 1978 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U S A MJL 7-4237R

This asthmatic isn't worried about his next breath...

he's active he's effectively maintained on

QUIBRON®

Each capsule or tablespoonful (15 ml) liquid contains theophylline (anhydrous) 150 mg and glyceryl guaiacolate (guaifenesin) 90 mg



- theophylline for effective around-the-clock bronchodilator therapy
- 100% free theophylline

Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100. Liquid in bottles of 1 pint and 1 gallon

See package insert for complete prescribing information.

Mead Johnson PHARMACEUTICAL DIVISION

© 1979 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. MJL 8-4294R2

FUTURE FILE

Emergency Services Workshop

"Emergency Services Deployment" is the subject of the third workshop at Wayne State University. The audience expected includes fire chiefs, police chiefs, EMS planners and city managers. The seminar deals with decision-making problems faced by police, fire and EMS planners. The date is Wednesday, Aug. 8. Write Joanne Juhl, College of Engineering, Wayne State University, Detroit, Michigan 48202.

Childhood Cancer Conference

"Status of Curability of Childhood Cancers" will be the subject of the 24th annual Clinical Conference to be held in Houston at the Shamrock Hilton Hotel Nov. 8-10. For information write Stephen C. Stuyck, M. D. Anderson Hospital and Tumor Institute, Houston, Texas 77030.

Nephrology Symposium

"Clinical Nephrology 1979" is the title of a one-day symposium to be conducted Friday, Sept. 28, at the Airport Hilton Hotel in Indianapolis. Sponsored by the Kidney Foundation of Indiana and the I.U. School of Medicine, it will cover the clinical, diagnostic and treatment aspects of hypertension, hematuria, the child with urinary tract infections, and kidney stones.

For further information, write the Kidney Foundation of Indiana, 1010 E. 86th St., Indianapolis 46240, or the Division of Continuing Medical Education, I.U. School of Medicine, 1100 W. Michigan St., Indianapolis 46223.

AMA Combined Seminar

The AMA will conduct a combined seminar at Portsmouth, N.H. Aug. 27-Sept. 1. Two programs will be combined into "Medical Staff Leadership/Dynamics of Conflict Resolution." The registration fee for AMA members is $450, for non-members $550, and for others $600. The sessions will be at Wentworth-by-the-Sea.

Write or call the AMA Department of Negotiations, 535 N. Dearborn, Chicago 60610. Tel: (312) 751-6634.

Toxins in Human Food

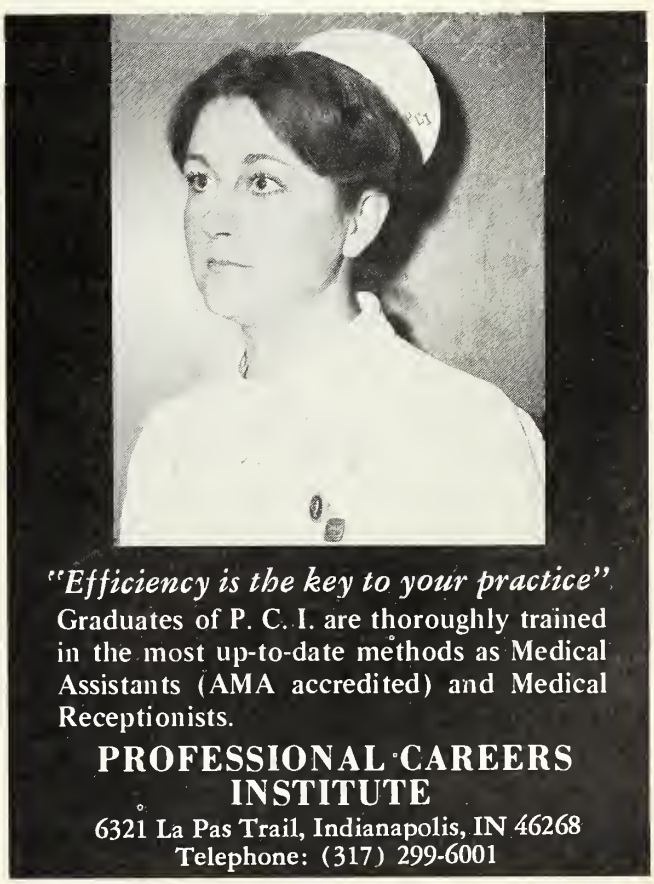
"Toxins in Human Food" is the subject of a national conference scheduled for Sept. 23 - 26 in Detroit at the Radisson-Cadillac Hotel. Detailed program information and registration is available from University of Michigan Extension Service, 412 Maynard St., Ann Arbor, Mich. 48109.

Calendar of Events

July 4—Independence Day
July 13—ISMA Annual Reports Due
July 15—Board of Trustees
July 19—Impaired Physician Committee
July 22—AMA Scientific Meeting, Chicago
Aug. 5—Commission on Public Relations
Aug. 15—Commission on Constitution & Bylaws
Aug. 15—Ad Hoc Committee on Immunization
Aug. 19—Commission on Medical Education
Aug. 19—Subcommission on Accreditation

Antibiotic Review Conference

A "First National Conference on Antibiotic Review: West Coast Update" will be held Sept. 10-11 at the Bonaventure Hotel, Los Angeles. This is a second meeting of the conference for west coast physicians and those in the other portions of the country who missed the original conference because it was over-subscribed. Write to Muriel Myers, Suite 118, 67 Peachtree Park Dr., Atlanta, Ga. 30309.



WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

CANCER CORNER

NEW ACS PUBLICATIONS

Prostate Cancer: Progress and Change

Recent change and progress in the overall approach to a significant oncologic problem, prostate cancer, is thoroughly discussed and documented in this new publication. The author, Dr. Gerald Murphy, covers epidemiology, morphology and histological prognosis, chemical diagnosis, staging, classification and treatment, palliation therapy and future perspectives.

Tobacco and Health

A major public health problem, the widespread inhalation of tobacco smoke, is discussed by Dr. John Holbrook of the University of Utah. Subjects covered include the physicochemical properties and pharmacology of tobacco smoke, smoking and total mortality, involuntary smoking, and the effects of tobacco smoke on fetal development. Also examined in detail is the clinical correlation between smoking and a number of disparate diseases.

Unproven Methods of Cancer Management

The 1979 edition of the Unproven Methods of Cancer Management booklet are now available from the American Cancer Society.

Cancer Facts and Figures for Black Americans

A new publication, "Cancer Facts and Figures for Black Americans, 1979," is now available from the ACS. It is a supplement to the Society's "1979 Cancer Facts and Figures," and includes key facts about the increase of cancer incidence and death among America's largest minority. This publication can be used throughout the year to inform people in communities, media representatives, key government officials, religious leaders and ACS volunteers.

BE THE DOCTOR YOU WANT TO BE IN THE NAVY

For more information, call toll-free 800-841-8000 (in Georgia: 800-342-5855) or see your local Navy representative.

When it comes to nuclear training, no one can give you a better start.

In the Navy, it's not just a job. It's an adventure. For more information, call toll-free 800-841-8000 (in Georgia: 800-342-5855) or see your local Navy representative.

ONE OF OUR BEST MEDICINES IS

℞ LOVE.

Another one is experience. Those two things, together with exceptional staff, outstanding facilities and value, are the reason why so many people trust the name Americana.

Americana Healthcare Center

1345 N. Madison Ave. / Anderson, IN 46011 / (317) 644-2888
343 S. Nappanee St. / Elkhart, IN 46514 / (219) 293-2544
5600 E. 16th St. / Indianapolis, IN 46218 / (317) 356-0911
2010 N. Capitol Ave. / Indianapolis, IN 46202 / (317) 924-5821
8350 Naab Rd. / Indianapolis, IN 46260 / (317) 297-4111
3518 S. Lafountain St. / Kokomo, IN 46901 / (317) 453-4666
2201 Cason St. / Lafayette, IN 47904 / (317) 447-4102

Open Visiting Hours / Approved for Medicare

Americana. The nursing care for people who care about quality.



AUXILIARY REPORT

This month's Auxiliary Report was prepared by Carol E. (Mrs. James) Benson of Elkhart, Northern Area vice-president.

Charlotte (Mrs. Abner P.) Bennett
President, ISMA Auxiliary

The ISMAA held a combined workshop May 30 for the Southern, Central, and Northern Area auxiliaries at the gracious home of Mrs. Glenn Irwin in Indianapolis. Chairmen for this workshop were Mrs. Irwin, first vice-president; Mrs. Koontz, Central Area vice-president; Mrs. Wrenn, Southern Area vice-president; and Mrs. Benson, Northern Area vice-president. Fifty-six auxilians and six guests were present.

The purpose of the annual workshop is to supply the auxiliary members pertinent information concerning present state and national policies. This meeting also provides an opportunity for the members to become acquainted with the newly elected state board officers and committee chairmen.

During the morning session Mrs. Wayne C. Brady, a member of the AMA Auxiliary's Long Range Planning Committee, congratulated Indiana for raising its membership since 1977/1978. Because of this rise in membership, Indiana will have nine county presidents-elect eligible for the upcoming Leadership Confluence in Chicago. This confluence is invaluable for the future county president in the wealth of information it offers.

Mrs. Brady suggested that county auxiliaries consider having a Long Range Planning Committee; the national committee wants to know what we would like for both short and long range goals. The national will provide the counties with guidelines upon request. She also reported that on-sight visiting will be offered to the county auxiliaries at the discretion of the state auxiliary president.

The workshop then broke into individual area groups with the area vice-presidents listening to the suggestions and questions from their counties. The Legislation, AMA-ERF, and Health chairmen visited each group and spoke about important information concerning their specialty.

After lunch Dr. Nancy Roeske, a psychiatrist, spoke on medical marriages. She stressed the importance of both the physician and spouse having a personal sense of one's self. Society expects both individuals to be above reproach and to be viable forces in their community. But how does the physician (and spouse) maintain a proper balance with profession, spouse, children and self? How much does one give to oneself and to one's family?

Dr. Roeske said that more and more students are being married while in medical school and a third of these marriages will end in divorce one to two years after medical school. Another traumatic period is the "mid-life crisis" when the physician and spouse are in the 35-55 age bracket. At this point 50% of medical marriages will have ended in divorce! Her advice was to be honest with yourself and with your spouse. What are your individual goals? Communicate! A discussion period, which could have gone on indefinitely, followed Dr. Roeske's presentation.

Indiana Medical Foundation

The Indiana Medical Foundation was organized to furnish support for the educational activities of the Indiana State Medical Association. These activities include programs for continuing education and the scientific publications of **The Journal**. Contributions made to the foundation are deductible by donors in accordance with the Internal Revenue Code. Bequests, legacies and gifts are deductible for federal estate and gift tax purposes. Memorial contributions made to the foundation will be formally recorded and acknowledgment will be sent to the family. Gifts, bequests, and memorial contributions may be mailed to the foundation at 3935 N. Meridian St., Indianapolis 46208.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. In the male: Eunuchoidism and eunuchism, 10 to 40 mg ; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg ; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When
impotence
is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

There's A Word For It

Plain Supine Film Of the Abdomen

RICHARD J. NOVEROSKE, M.D.
Evansville

It's common in an x-ray department to get a request for a "flat plate" or a "flat plate of the abdomen" several times a day.

We translate this old style request into a plain supine film of the abdomen; that's what we take, and that's what we call it sometimes in the x-ray report. Or we may call it a plain film of the abdomen or a scout film if it is followed by an excretory urogram.

We haven't used plates in x-ray for many years; they were made of glass and coated with a sensitive emulsion to record an image; they worked, but they were easy to break, caused cuts, were difficult to store, and heavy. Films have been in use throughout the lifetimes of most all who practice medicine nowadays. No one seriously thinks that the attending physician who orders a "flat plate" really wants us to use a plate; he wants a film—a thin, flexible sheet of polyester that is coated with a sensitive emulsion—like all the rest of the x-ray films we use. So why does he say "plate"? Maybe there's a vigorous sound to the phrase "flat plate"—two one-syllabled words of plain English with the accent on the first word—that endears it to the clinicians—gives them a sense of power. I don't know the real reason for the persistence of this obsolete term. I can only conjecture and translate that request into the real thing he wants—a plain supine film of the abdomen.

★
Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
Since 1899
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
Suite 624, 6100 North Keystane Avenue Telephane: (317) 255-6525
Mailing Address: P.O. Bax 20132, Indionopolis 46220
Narthern Indiono Office: Dauglos O. Sellon, Representative
120 LaSalle West Bldg., Suite 304
Sauth Bend, In. 46601 Telephane: (219) 289-7332

PART 1, Urologic Neoplasia Series

Status of Adjuvant Therapy for Renal Cell Cancer

ARTHUR SAGALOWSKY, M.D.[1]
Dallas, Texas
JOHN DONOHUE, M.D.[2]
Indianapolis

RENAL CELL CARCINOMA is the most common adult primary renal tumor, with 7,000 new cases annually in the U.S. It ranks 10th and 12th in men and women, respectively, as cause of cancer, and is the 15th cause of cancer death overall.[1] Hematuria, pain, and abdominal mass are the most common symptoms, although all three are present in only about 10% of cases. Furthermore, the wide range of symptoms, including pain from metastases, hypercalcemia, hepatic dysfunction, anemia, polycythemia, weight loss, sudden varicocele, hypertension, "coin lesion" on chest film, have long been recognized.

Great advances in diagnosis have occurred in recent years. High quality nephrotomography, ultrasound, and CAT scan have added further non-invasive accuracy to IVP. Needle aspiration, selective renal arteriography, and pharmacoangiography (based on lack of response of tumor vessels to vasoconstrictors), and venocavography have increased diagnostic accuracy and made planned surgical therapy more effective. Lang has recently reviewed all these topics and has provided an extensive bibliography.[2] Following diagnosis of a probable renal cell cancer and determination of its extent with regard to contiguous viscera and the great vessels by the above methods, metastatic survey is done including liver function tests, chest x-ray with lung tomograms, and bone scan. Liver scan is reserved pending interpretation of liver function tests and celiac injections from the arteriogram. Abnormalities on bone scan are compared with x-rays of the area. Brain scan is done only if the history or physical exam suggest CNS involvement.

The standard treatment of renal cell cancer with a negative metastatic workup is radical nephrectomy —early ligation of the renal artery, then renal vein, removal of the kidney and ipsilateral adrenal gland with Gerota's fascia intact and en bloc regional lymphadenectomy.[3] The higher the tumor grade the more likely is regional lymph node metastasis. Robson, *et al*[4] and Skinner, *et al*[5] have each shown from retrospective analyses increased 5-year survival for each tumor grade (I, II, III) following radical nephrectomy versus simple nephrectomy (85%/77%, 64%/31%, 40%/8%, respectively).

RADIOTHERAPY

There is much controversy on whether or not adjunctive use of radiotherapy, either pre- or postoperatively, improves or decreases survival.[6,7,8,9,10,11] There does appear to be a consensus for its use when tumor spillage or residual local disease is present.[11,12] Palliation of focal metastatic symptoms, usually bone pain, is often achieved with radiotherapy but an effect on survival relative to disseminated metastases is rare.

SPONTANEOUS REGRESSION

Reports of spontaneous regression of metastases in this disease have been the subject of much speculation and investigation.

[1]AUA Scholar, Clinical Assistant Professor of Urology, The University of Texas Southwestern Medical School.
[2]Professor and Chairman, Department of Urology, Indiana University Medical Center.

This is the first in a short series of articles dealing with urologic neoplasia. The next article in this series will deal with surgical and adjuvant therapy for testicular carcinoma.

Goodwin, *et al*[13] and Bloom[14] reported the phenomenon's occurrence following nephrectomy. Holland[15] and Bloom[14] have carefully reviewed the 40 documented case reports of regression of metastases. The metastases were from the following locations: 37 pulmonary, one osseous, one cutaneous, one intestinal. Regression of the pulmonary metastases occurred folllowing nephrectomy in 28 cases, after irradiation in two, and without treatment in one. The remaining six cases had appearance and later regression of metastases on chest films after nephrectomy. Histologic proof of pulmonary metastases was obtained only six times. Most cases involved older men. Bloom concluded the incidence of spontaneous metastatic regression is 0.3%. Fever, infection, endocrine influences (age and sex related) and activation of specific host immune response all have been suggested as explanations.[16]

IMMUNOLOGY

There has been much research on the immunologic aspects of renal cell cancer. Humoral response has been demonstrated by finding both cytotoxic antibodies,[17] tumor-specific complement-dependent antibodies[18] and tumor specific antigens[19] in sera of patients with renal cell cancer. De Kernion has provided a recent thorough review of the work of many authors on these topics.[20] There is also evidence for altered cellular immune response to cutaneous stimulants such as PPD (tuberculin antigen) and DNCB (denitrochlorobenzene).[20,21,22] However, interpretation of the findings in brief clinical trials relative to cellular immunity and tumor stage and prognosis are controversial. Despite sporadic reports of improvement or stabilizations of metastases, administration of BCG (bacille calmette-Guerin) has not proved advantageous statistically in small series.[20,23] Obviously, larger series are required to properly evaluate this form of active nonspecific immunotherapy. Trials at active specific immunotherapy by vaccination with cells from the patient's own tumor are underway at several centers. Studies utilizing passive immunotherapy, with transfer factor,[24] or immune RNA,[20] also suggest clinical stabilization and improved survival but statistical verification is lacking.

HORMONAL

Evidence for a possible hormonal role in renal cell cancer has come from laboratory and clinical observations. Renal tumors have been induced in animals by administration of estrogens.[25,26,27] Further, these tumors have been inhibited by endocrine manipulation such as estrogen antagonism.[26] The clinical observation has been made in humans that men predominate both in the incidence of renal cell cancers, and in their spontaneous regressions. Since Bloom's original report, several authors have reported on the use of androgens and or progestins for metastatic renal cell cancer. Revision of Bloom's summary in 1973, including all series published to date, reveals 491 patients treated with progestins and or androgens and an objective response rate of 10%. (*Table*). This low degree of clinical success has dampened enthusiasm for this type of treatment. However, application of specific estrogen and androgen receptor assays, as first used in breast cancer, should allow scientific determination of the true role

TABLE

Hormone Treatment of Metastatic Renal Cell Cancer

Authors	Hormone Treatment*	No. Cases	Responders No.	Responders %
Woodruff, *et al*[41]	P	4	1	25
Melander, *et al*[39]	P&A	20	4	20
Jenkin[39]	A	15	1	6.7
Samuels, *et al*[30]	P/A	23	4	17
Talley[34]	P	61	7	11.4
	A	37	0	0
Papac[38]	P/A	12	4	33.3
Paine, *et al*[29]	P	15	3	20
Wagle & Murphy[32]	P/A	43	8	18.6
Werf-Messing & Gilse[33]	P	31	2	6.5
	A	2	0	0
Bloom[14]	P/A	80	13	16.3
Lokich & Harrison[35]	P	23	0	0
	A	37	0	0
Montie, *et al*[36]	P	17	2	11.8
	A	6	0	0
Skinner & DeKernion[37]	P&A	65	0	0
		491	49	10

* **P** = progestin; **A** = androgen; **P/A** = androgen after progestin failure

for hormonal therapy in this malignancy.

CHEMOTHERAPY

The results with specific single agent chemotherapy for metastatic renal cell cancer have been discouraging to date.[34,35,42,43,44] Virtually every known agent has been used. The best results have been 7/34 responses to the alkylating agent cyclophosphamide,[34] 8/35 responses to the antimiotic agent vinblastine.[44]Cis-diamminodichloroplatinum, the new agent which has been so useful in other genitourinary cancers (most notably, testis and bladder), appears ineffective in renal cell cancer.[45] Due to these poor results, multiple-drug protocols are now under investigation. The best results have been those reported by Merrin, *et al*[43] of subjective and objective response rates of 60% to vinblastine and CCNU and 54% to vinblastine and methyl CCNU in 44 patients with metastatic disease.

SUMMARY

The optimal combination of uses of all modalities listed—surgery, radiotherapy, immunotherapy, hormonal therapy, chemotherapy—either for maximal chance at cure or palliation remains uncertain. The variable natural history of the disease makes interpretation of treatments difficult. Clearly, some patients mount host responses, hormonal, immunologic or other, which slow or even arrest disease progression. Thus, the use of nephrectomy plus excision of solitary metastases to reduce tumor burden continues in some settings. Preoperative tumor angio infarction to release tumor antigen and stimulate host antitumor antibody production is purely experimental at this time. Advances in specific chemotherapy will require either better understanding of the normal versus tumor cell cycles or serendipidous observation of a favorable drug response as has been the first step in so many other tumor systems now successfully treated. It is predicted that successful adjunctive therapy will expand rather than contract the surgical role in the treatment of this disease. Aggressive surgical handling of bilateral renal tumors or tumors in solitary kidneys is now feasible with hypothermic and pharmacologic renal protection for *in situ* or *ex vivo* intrarenal microsurgery and autotransplantation where necessary. These methods will increase in popularity when successful adjuvant therapy is available.

BIBLIOGRAPHY

1. Carter SK, Wasserman TH: "The chemotherapy of urologic cancer." *Cancer,* 36:729-747, 1975.
2. Lang EK: "Diagnosis of renal parenchymal tumors." *In Genitourinary Cancer,* W. B. Saunders Co, 40, 1978.
3. Foley FEB, Muluvaney WP, Richardson EJ, Victor I: "Radical nephrectomy for neoplasm." *J. Urol,* 68: 39, 1952.
4. Robson CJ, *et al:* "The results of radical nephrectomy for renal cell carcinoma." *Trans. Am. Assoc. Genitourin. Surg.,* 60:122, 1968.
5. Skinner DG, *et al:* "Diagnosis and management of renal cell carcinoma." *Cancer,* 28:1165, 1971.
6. Riches, EW, Griffiths IH, Thackray AC: "New growths of the kidney and ureter." *Br. J. Urol.,* 23: 297-356, 1951.
7. Brotherton DG: "The place of radiotherapy in the treatment of hypernephroma." *Br. J. Radiol,* 37: 144-146, 1964.
8. Flocks RH, Kadesky MC: "Malignant neoplasms of the kidney—an analysis of 353 patients followed for five years or more." *J. Urol.* 79:196-201, 1958.
9. Peeling WB, Martell BS, Shepheard BG: "Postoperative irradiation in the treatment of renal cell carcinoma." *Br. J. Urol.,* 41:23, 1969.
10. Finney R: "An evaluation of postoperative radiotherapy in hypernephroma treatment—a clinical trial." *Cancer,* 32:1332, 1974.
11. Van der Werf-Messing B: "Carcinoma of the kidney." *Cancer,* 32: 1056, 1973.
12. Windeyer B, Riches E: "Radiotherapy and combined treatment of renal tumors in adults." *Tumors of the Kidney and Ureter,* 291, 1964.
13. Goodwin WE, Mims, MM, Kaufman JJ, *et al:* "Under what circumstances does 'regression' of hypernephroma occur?" In King, JSJ (editor), *Renal Neoplasia,* Boston, Little Brown & Co., 1967.
14. Bloom HJG: "Hormone-induced and spontaneous regression of metastatic renal cancer." *Cancer,* 32:1066-1071, 1973.
15. Holland JM: "Cancer of the kidney —natural history and staging." *Cancer,* 32:1030, 1973.
16. Everson TC, Cole WH: "Spontaneous regression of adenocarcinoma of the kidney." In *Spontaneous Regression of Cancer,* pp 11-87, 1966.
17. Cummings KB, Peter JB, Kaufman JJ: "Cytotoxic serum factors in patients with renal cell carcinoma." *J. Urol.,* 111:330, 1974.
18. Hakala TR, Castro AE, Elliott AY, Fraley EE: "Humoral cytotoxicity in human renal cell carcinoma." *Invest. Urol.,* 11:405, 1974.
19. Sternsward J, Almgard LE, Frawzen S, *et al:* "Tumor distinctive cellular immunity to renal carcinoma." *Clin. Exp. Immunol.,* 6:963-968, 1970.
20. DeKernion JB: "The status of tumor immunotherapy in genitourinary cancer." *Genitourinary Cancer,* W. B. Saunders Co., 1978.
21. Morales A, Eidinger D: "Immune reactivity in renal cancer: A sequential study." *J. Urol.,* 115:510, 1976.
22. Catalona WJ, Chretien PB, Trakan EE: "Abnormalities of cell-mediated immunocompetence in genitourinary cancer." *J. Urol.,* 111:229, 1974.
23. Morales A, Eidinger D: "Bacille calmette-guerin in the treatment of adenocarcinoma of the kidney." *J. Urol.,* 115:377, 1976.
24. Montie JE, Buckowski RM, Deodhar SD, *et al:* "Immunotherapy of disseminated renal cell carcinoma with transfer factor." *J. Urol.,* 117:553, 1977.
25. Kirkman H: "Oestrogen induced tumors of the kidney", Nat'l Cancer Inst. Monogr. No. 1, Washington, U.S. Govt. Printing Office, 1959.

26. Bloom HJG, Roe FJC, Mitchley BVC: "Sex hormones and renal neoplasia." *Cancer*, 20:2118, 1967.
27. Bloom HFJ, Baker WH, Dukes CE, Mitchley BCV: "Hormone dependent tumors of the kidney." *Br. J. Cancer*, 17:646, 1963.
28. Bloom HJG: "Hormone treatment of renal tumors—experimental and clinical observations." In *Tumors of the Kidney and Ureter*, EN Riches, ed., London, Livingstone, 311, 1964.
29. Paine WH, Wright FW, Ellis F: "The use of progestin in the treatment of metastatic carcinoma of the kidney and uterine body." *Br. J. Cancer*, 24:277, 1970.
30. Samuels ML, Sullivan P, Howe CD: "Medroxyprogesterone acetate in the treatment of renal cell carcinoma." *Cancer*, 22:525, 1968.
31. Talley RW, Moorhead EL, Tucker WG, San Diego EL, Brennan MJ: "Treatment of metastatic hypernephroma." *JAMA*, 207:322, 1969.
32. Wagle DG, Murphy GP: "Hormonal therapy in advanced renal cell carcinoma." *Cancer*, 28:318, 1971.
33. Werf-Messing Bvander, Van Gilse HA: "Hormonal treatment of metastases of renal cell carcinoma." *Br. J. Cancer*, 25:423, 1971.
34. Talley RW: "Chemotherapy of adenocarcinoma of the kidney." *Cancer*, 32:1062, 1973.
35. Lokich JJ, Harrison JH: "Renal cell carcinoma: Natural history and chemotherapy experience." *J. Urol.*, 114:371, 1975.
36. Montie JE, Steward BH, Straffon RA, Banowsky LHW, Hewitt CB, Montague, DK: "The role of adjunctive nephrectomy in patients with metastatic renal cell carcinoma." *J. Urol.*, 117:272, 1977.
37. Skinner DG, DeKernion JB: "Clinical manifestations and treatment of renal parenchymal tumors." In *Genitourinary Cancer*, W. B. Saunders, 107, 1978.
38. Papac RJ: "Hormonal therapy of renal cancer." *Proc. Am. Assoc. Cancer Res.*, 10:67, 1969.
39. Jenkin RDT: "Androgen in metastatic renal adenocarcinoma." *Br. Med. J.*, 1:361, 1967.
40. Melander O, Natter G, von Schrieb T: "Hormone-handling av metastaserande renal cancer." *Nord. Med.*, 78:1309, 1967.
41. Woodruff MW, Wagle D, Gailoni SD, Jones R: "The current status of chemotherapy for advanced renal carcinoma." *J. Urol.*, 97:611, 1967.
42. Carter SK, Wasserman TH: "The chemotherapy of urologic cancer." *Cancer*, 36:729, 1975.
43. Merrin C, Mittleman A, Fanous A, Wajsman Z, Murphy GP: "Chemotherapy of advanced renal cell carcinoma with vinblastine and CCNU." *J. Urol.*, 113:21, 1975.
44. Hrushesky WJ: "What's old and new in advanced renal cell carcinoma." *Proc. Amer. Soc. Clin. Oncol.*, 18: 318, 1977.
45. Rossof AH, Talley RW, Stephens RL: "Phase II evaluation of single high dose cis-diamminodichloroplatinum (II) (NNSC, 119875, CACP) in gynecologic and genitourinary neoplasia."

CME QUIZ

Neonatal Seizures

The following are answers to the CME quiz that appeared in the June issue of THE JOURNAL. The article upon which the questions were based was "Neonatal Seizures," by Christopher L. Meyer, M.D.

1. e	6. b
2. c	7. e
3. c	8. c
4. c	9. a
5. d	10. a

Although a CME article does not appear in this issue, the 19th article in the series will appear in the August issue. Articles are produced by the faculty of the Indiana University School of Medicine in cooperation with the school's Division of Postgraduate and Continuing Medical Education. Successful completion of the quiz that accompanies each article earns the physician one credit hour in Category 1 for the Physician Recognition Award of the American Medical Association. The answers to each month's quiz are printed in THE JOURNAL the following month.

CASE REPORTS:

The Diagnosis of Hyperlipidemia in Infancy and Childhood

(Acumen or Serendipity?)

HAROLD E. STADLER, M.D.
Indianapolis

R. V. was born on 9-9-77 and he weighed 8 lbs. and 1 oz. His weight gain was excessive such that at 7 months of age he weighed 20½ lbs, and at one year 27 lbs. Bronchial asthma developed during April of 1978 and a protein electrophoresis was requested. The astute laboratory technician noted the "milky" nature of the serum.

The infant's father (72″ tall and 155 lbs.) had a serum cholesterol level of 190 mg.%, and the mother (64″ tall and 170 lbs.) showed a serum cholesterol level of 171 mg.% and a triglyceride serum level of 140 mg.%.

R.V. 4-23-78 Serum Cholesterol 280 mg.%.
Serum Triglyceride 191 mg.%.

Treatment consisted of low fat-cholesterol diet and 1 mg. of Choloxin daily.

8-22-78 Serum Cholesterol 114 mg.%.
Serum Triglyceride 67 mg.%.

* * *

E. S. was a 3-year-old orphan maintained temporarily on the metabolism ward. Adoption proceedings had been instituted and serology was requested. The serum had a "milky" quality. Funduscopic examination showed a marked lipemia retinalis. The serum cholesterol level was found to be 15,000 mg.%! Fortunately, we had no antilipidemic agents in the year 1940 so with dietary management alone the cholesterol level was restored to normal and maintained there.

From the Department of Pediatrics, Community Hospital, 1500 N. Ritter St., Indianapolis, Ind. 46219.



PHOTO COURTESY OF DEPT. OF PEDIATRICS, STATE UNIVERSITY OF IOWA

E. S.

Epstein-Barr Mononucleosis in Older Persons

ERIC L. DYER, M.D.
Bedford

PEAK PREVALENCE between 15-25 years of age is a unique epidemiologic feature of Epstein-Barr (EB) mononucleosis, but it occurs in middle and old age as well. EB mononucleosis has been reported in an 86-year-old woman following blood transfusion.[1] Naturally acquired infection has been described in several persons over 50 years.[2-6] About 3% of cases occur in persons older than 30 years in series from a public health service[7] and from two urban general hospitals.[8-9] About 1% of cases occur in persons older than 40 years.[4,7]

Almost all cases in older persons represent delayed exposure to Epstein-Barr virus (EBV) rather than reinfection or reactivation of previous infection.[10-11] EBV-specific IgG antibodies develop during clinical illness, persist for many years (probably for life), and confer immunity to EB mononucleosis.[12-16] IgG also develops during subclinical exposure to EBV.[13] Lower socioeconomic conditions favor exposure to the virus during childhood when clinical illness is rare. While EBV is worldwide in distribution, EB mononucleosis is never seen in many "developing" nations.[11] In the United States about 50% of children develop EBV-specific IgG by age 2 years, and about 80% develop antibodies by age 5 years.[16-17] Young adults and older persons with EB mononucleosis are usually from middle and upper socioeconomic classes and represent the fraction of the population that escaped childhood exposure.

The author is an internist with the Bedford Medical Center, 2900 W. 16th St., Bedford, Ind. 47421.

CLINICAL FEATURES

Hoagland provides an authoritative clinical description of EB mononucleosis.[18-19] He emphasizes that chest pain, rhinorrhea, cough, arthralgias and tender adenopathy usually are absent in this disease. Clinical features of the illness in older persons and in young adults are qualitatively similar, but there is a tendency to more prolonged fever and malaise, more intense hepatitis and less cervical adenopathy in the older group.[4,7,9] One 60-year-old man with EB mononucleosis did not have pharyngitis at any time during his illness.[4]

EB mononucleosis may be missed in older persons, because it may not be considered among several illnesses presenting with some combination of fever, pharyngitis, lymphadenopathy, malaise, hepatitis and atypical lymphocytosis in this age group. Cytomegalovirus,[20,21] acquired toxoplasmosis[22] or adenovirus infections present a symptom complex most similar to EB mononucleosis. Pharyngitis and cervical adenopathy are rare in cytomegalovirus infections. EB mononucleosis also has to be differentiated from acute viral hepatitis, tularemia, listeriosis, brucellosis, infective endocarditis, tuberculosis, streptococcal pharyngitis, Vincent's angina, nonbacterial exudative pharyngitis, rubella, rubeola, diphtheria, malaria, *Salmonella* infection, acute leukemia, lymphoma, agranulocytosis and drug reactions.

Available evidence does not suggest that complications of EB mononucleosis (e.g., splenic rupture, hemolytic anemia, upper airway obstruction, meningitis, facial palsy, Guillain-Barre syndrome, myocarditis) are more frequent in old age.[23]

DIAGNOSIS

Most cases of EB mononucleosis can be established by typical clinical features, presence of at least 50% lymphocytes with at least 10% atypical lymphocytes in peripheral blood, and either a heterophile antibody titer after guinea pig absorption of at least 1:40 or a positive "Monospot" test. However, possibly as many as 10% of cases of EB mononucleosis are heterophile negative.[24] Also, the heterophile IgG antibody is not specific for EBV and may not rise until several weeks after onset of symptoms. False positive Monospot tests are rare but have been reported for Hodgkins and non-Hodgkins lymphoma,[25] acute leukemia,[26] serum hepatitis[27] and pancreatic carcinoma.[28] When the Monospot has been falsely positive, the heterophile antibody has been insignificant when measured.[25,27] The Mono-

spot also may remain negative for several weeks after onset of illness.

These imperfections in the routinely available serologic tests for EB mononucleosis may confuse the diagnosis, especially in an older person with an atypical clinical presentation. Fortunately, recently developed immunologic assays for EBV-specific antibodies can usually solve the problem.[24] Clinically, the most useful of these is the indirect immunoflorescence assay for EBV-specific IgM.[29] This assay is available through the Center for Disease Control, Atlanta, Georgia, and routinely takes about one month for reporting. Since this IgM persists only a few weeks after clinical illness, a single serum specimen is often adequate for diagnosis. Paired specimens are preferred, however. Elevated EBV-specific IgM occurs in all cases of EB mononucleosis. EBV-specific IgG is generally not useful for diagnosis, because the titer usually rises to maximum levels during the 30-50 day incubation period and remains elevated for years.

REFERENCES

1. Blacklow NR, *et al:* Mononucleosis with heterophile antibodies and EB virus infection: Acquisition by an elderly patient in hospital. *Am J Med,* 51:549-552, 1971.
2. Corr WP: Infectious mononucleosis in the aging. *JAMA,* 202:173, 1967.
3. Golden RL: Geriatric infectious mononucleosis: Report of a case with Epstein-Barr virus antibodies. *J Am Geriatr Soc,* 17:426-428, 1969.
4. Horwitz CA, *et al:* Clinical and laboratory evaluation of elderly patients with heterophile antibody positive infectious mononucleosis. *Am J Med,* 61:333-339, 1976.
5. Ransom JH: Infectious mononucleosis in an elderly farmer. *JAMA,* 196: 154, 1966.
6. Shapiro CM: Infectious mononucleosis in the aged. *Ann Intern Med,* 51: 1092-1097, 1959.
7. Evans AS. Infectious mononucleosis: Recent developments. *Gen Pharmacol,* 40:127-134, 1969.
8. Belfrage S: Infectious mononucleosis: An epidemiological and clinical study. *Acta Med Scand,* 171:531-541, 1962.
9. Dunnet WN: Infectious mononucleosis. *Br Med J,* 1:1187-1191, 1963.
10. Bender CE: Recurrent mononucleosis. *JAMA,* 182:954-956, 1962.
11. Evans AS, ed.: *Viral Infections of Humans.* Plenum, 1976.
12. Evans AS, *et al:* Seroepidemiologic studies of infectious mononucleosis with EB virus. *N Engl J Med,* 279: 1121-1127, 1968.
13. Henle G, *et al:* Observations on childhood infections with the Epstein-Barr virus. *J Infect Dis,* 121:303-310, 1970.
14. Niederman JC, *et al:* Infectious mononucleosis: Clinical manifestations in relation to EB virus antibodies. *JAMA,* 203:139-143, 1968.
15. Niederman JC, *et al:* Prevalence, incidence and persistence of EB virus antibody in young adults. *N Engl J Med,* 282:361-365, 1970.
16. Sumaya CV, *et al:* Seroepidemiologic study of Epstein-Barr virus infections in a rural community. *J Infect Dis,* 131:403-408, 1975.
17. Porter DD, *et al:* Prevalence of antibodies to EB virus and other herpesviruses. *JAMA,* 208:1675-1679, 1969.
18. Hoagland RJ: The clinical manifestations of infectious mononucleosis: A report of two hundred cases. *Am J Med Sci,* 240:21-28, 1960.
19. Hoagland RJ: *Infectious mononucleosis.* Grune & Stratton, 1967.
20. Klemola E, *et al:* Cytomegalovirus mononucleosis in previously healthy individuals. *Am Intern Med,* 71:11-19, 1969.
21. Klemola E, *et al:* Infectious mononucleosis-like disease with negative heterophile agglutination test. Clinical features in relation to Epstein-Barr virus and cytomegalovirus antibodies. *J Infect Dis,* 121:608-614, 1970.
22. Remington JS, *et al:* Toxoplasmosis and infectious mononucleosis. *Arch Intern Med,* 110:744-753, 1962.
23. Evans AS: Complications of infectious mononucleosis: Recognition and management. *Hosp Med,* 3:24-25, 1967.
24. Henle W, *et al:* Epstein-Barr virus specific diagnostic tests in infectious mononucleosis. *Hum Pathol,* 5:551-565, 1974.
25. Wolf P, *et al:* False-positive infectious mononucleosis spot test in lymphoma. *Cancer,* 25:626-628, 1970.
26. Lee CL, *et al:* Horse agglutinins in infectious mononucleosis. *Am J Clin Pathol,* 49:12-18, 1968.
27. Seitanidis B: A comparison of the Monospot with the Paul-Bunnell test in infectious mononucleosis and other diseases. *J Clin Pathol,* 22: 321-323, 1969.
28. Sadoff L, *et al:* False-positive infectious mononucleosis spot test in pancreatic carcinoma. *JAMA,* 218: 1297-1298, 1971.
29. Banatvala JE, *et al:* Epstein-Barr virus-specific IgM in infectious mononucleosis, Burkitt lymphoma, and nasopharyngeal carcinoma. *Lancet,* 1:1205-1208, 1972.

INDIANA MEDICAL BUREAU

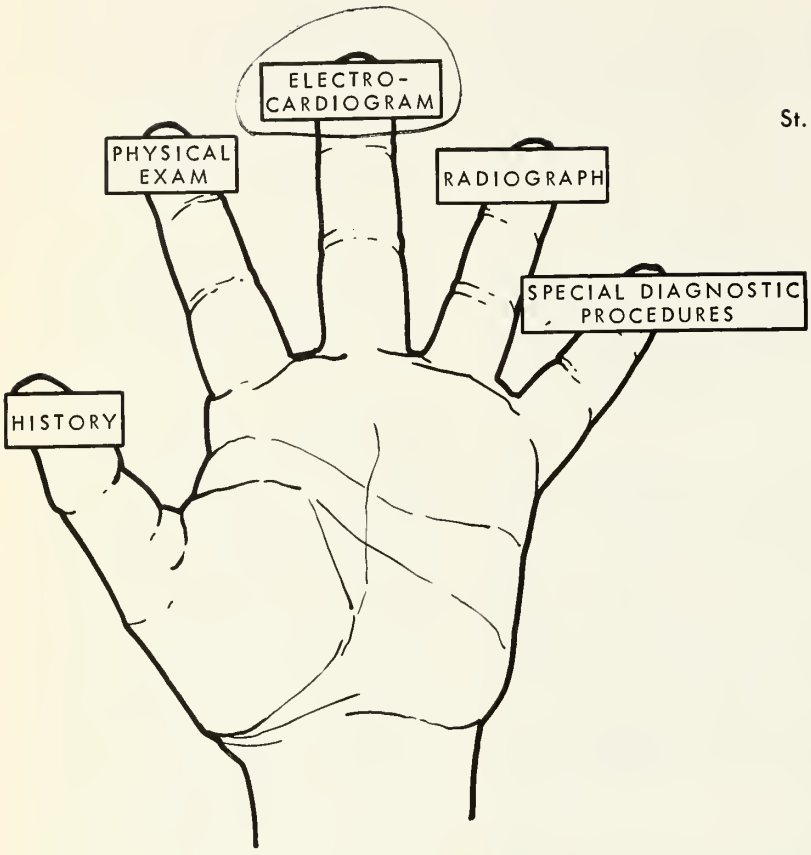
1010 East 86th St.—72 Winterton

Indianapolis 46240

844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service



R. JOE NOBLE, M.D.
D. A. ROTHBAUM, M.D.
E. F. STEINMETZ, M.D.
J. S. HILLIS, M.D.
St. Vincent Hospital and Health Care Center
Indianapolis

THE FIVE FINGERS OF CARDIOLOGY

The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac-diagnosis.

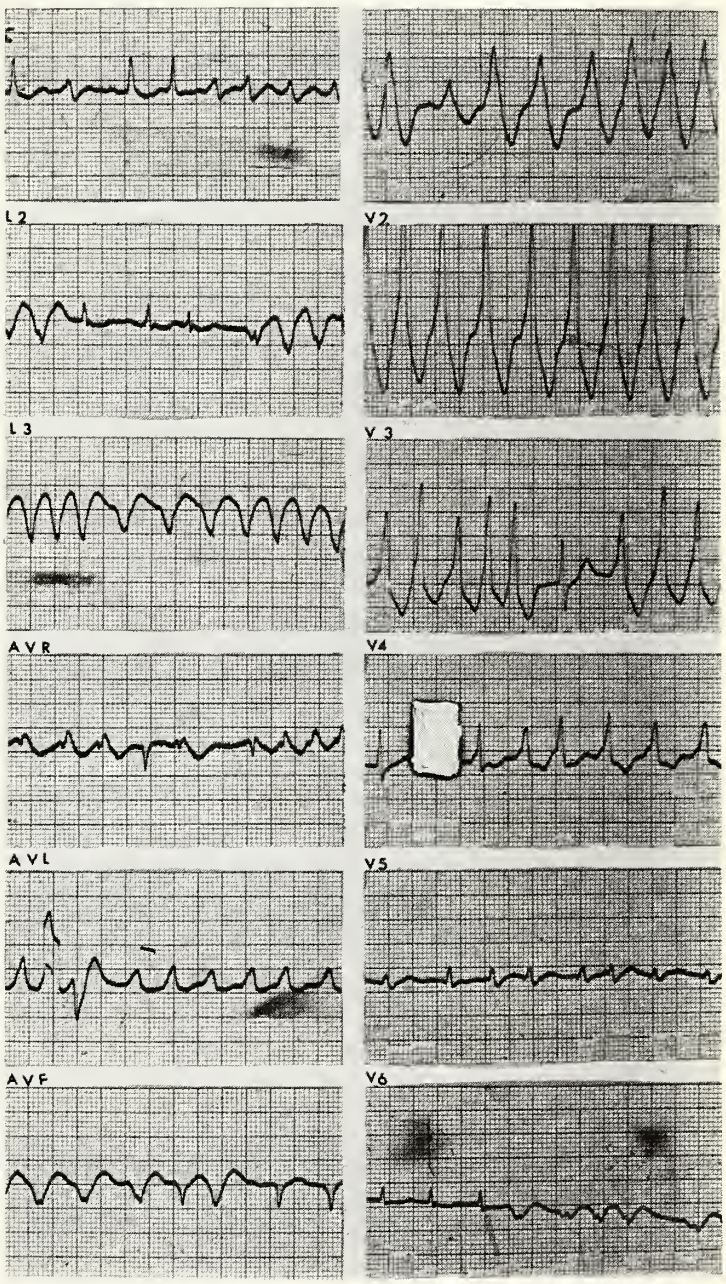
Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.

A 35-year-old man has intermittently experienced rapid palpitations. The episodes develop abruptly, and terminate just as abruptly, often in response to the patient's "bearing down." On this occasion, however, the palpitations are noticeably more rapid; the patient is lightheaded and has experienced syncope; and the episode persists.

Upon arrival in the emergency room, a rapid, irregular tachycardia is documented. The patient is hypotensive, and experiences syncope upon standing.

QUESTION: Interpret the electrocardiogram. Which therapy (therapies) would be appropriate? 1) Lidocaine 2) Cardioversion 3) Digitalis 4) Carotid Sinus Massage 5) Tensilon.

A Self-Assessment



ANSWER:

The rhythm is atrial fibrillation with rapid ventricular response. Note the undulating baseline in Lead 2, and the totally irregular ventricular response. The reason for the very broad QRS complexes is pre-excitation, i.e., the Wolff-Parkinson-White (WPW) Syndrome. The pre-excitation also explains the extraordinarily rapid ventricular response, even reaching 300 per minute in V3 and V6.

The rhythm is not ventricular tachycardia; the WPW configuration is confirmed by the broad, purely upright R-wave in V1 through V4, with a delta wave. In addition, ventricular tachycardia should be more regular.

Digitalis, which acts via the vagas, and other vagal manuevers (including carotid sinus massage and tensilon) are contraindicated. The bypass tract is atrial muscle, and its refractory period is abbreviated by vagal manipulation, thus facilitating conduction and speeding the ventricular response to atrial fibrillation. Cardioversion would clearly be indicated for severe hemodynamic compromise. Alternately, intravenous Lidocaine, by depressing conduction across the atrial muscle bypass tract, would slow the ventricular response and perhaps convert the rhythm.

It is well to remember that Digitalis, alone, is usually contraindicated in the Wolff-Parkinson-White Syndrome with rapid supraventricular tachyarrhythmias because of the potential for speeding the ventricular response to atrial fibrillation. Not only does the extraordinarily rapid ventricular response lead to serious hemodynamic compromise, and to syncope; but a very rapid ventricular response may degenerate into ventricular fibrillation, and cause sudden death.

Cerebrospinal Fluid Lactic Acid: A Valuable Aid in the of Diagnosis Septic Meningitis

GREGORY ELLIS, M.D.
TJIEN O. OEI, M.D.
Indianapolis

BACTERIAL MENINGITIS is a life-threatening disease in which prompt anti-microbial therapy may prevent death or significant neurological morbidity. The clinical problem is twofold: Does a treatable meningeal infection exist, and secondly, what microbial spectrum should be covered? Various tests have been proposed to supplement Gram stain, protein and glucose in attempting to answer these questions. Nitroblue tetrazoline test, limulus lysate test, teichoic acid levels, C.I.E. and enzymatic levels of CPK and LDH are examples of such.

Lactic acid (L.A.) levels in cerebrospinal fluid (CSF) may prove to be the answer to the first question.

From the Department of Clinical Pathology, Indiana University School of Medicine, Indianapolis.

As early as 1925, Killian[1] reported elevated levels of L.A. in CSF which subsequently was confirmed by others during that decade. Recently reports of Prockop[2] and Bland[3] have renewed interest in this assay. Brook[4] reported 205 samples from 97 patients with bacterial, fungal or tuberculous meningitis had L.A. levels above 4.0 meq/L, whereas all other meningitides had L.A. levels below this level. Treated patients had elevated levels for at least two days of therapy despite the loss of stainable and culturable organisms from the CSF. Relapse of meningitis was also associated with increasing L.A. levels.

These results prompted our laboratory to determine normal values and evaluate similar patients. We assayed L.A. using a DuPont ACA

GROUP	Age	L.A.	Glucose	Protein	Opening Pressure	Gram Stain	Culture	C.I.E.	WBC Count
1. No CNS Diagnosis (N = 18)	2 to 62 yrs.	mean - 1.66 range - 1.1-1.9	mean - 61 range - 58-104	mean - 39 range - 6-104	range - 96-180 nm H_20	ALL NEGATIVE	ALL NEGATIVE	NOT DONE	mean -1 WBC range - 0-5
2. CNS Inflammation	1 day	mean - 3.00	mean - 43.7	mean - 137	170 - 270	ALL NEGATIVE	ALL NEGATIVE	2 recorded as NEGATIVE for H. Flu. S. Pneumo. N. Men. Crypto.	mean - 1597 range - 0-9000/mm^3
ASEPTIC	to	range - 1.1-4.9	range - 7-94	range - 22-550	NOT ALL RECORDED				
Leukemia	58 yrs.								
CNS Bloods									
Multiple Sclerosis									
Viral Meningitis									
Hypoxic Seizures (N = 12)									
3. Culture Proved	2 days	mean - 9.65	mean - 14.4	mean - 309	120 mm H_20	GRAM POSITIVE Cocci in two cases, other eight NEGATIVE	ALL POSITIVE	S. Pneumo. only POSITIVE	mean - 2736 range - 22-9000 WBC's Polys predominant except 99% monos in Crypto.
N. Meningitis	to	range - 6.8-21.7 **	range - 0-34	range - 24-600	ONLY ONE RECORDED				
Cryptococcus Neo.	43 yrs.								
H. Influenza D									
Strep. Pneumo. B									
Strepto. Grp. D									
P. Aeruginosa									
(N = 10)									

***After three days treatment all meningitis cases showed L.A. levels between 2.1 - 3.8 (N = 4).*

as a stat procedure along with glucose and protein on fresh CSF samples. The results are shown in the accompanying *Table*.

Our data corroborate the findings of no false negative or false positive L.A. levels regarding septic meningitis. Our values for normal and meningitis patients were somewhat higher than Brooks' group, although the clinical relationships were identical. We attribute the difference to fresh (vs. H_2SO_4 preserved) specimens and an enzymatic (vs. gas-chromatographic) assay. Of particular interest was the intermediate group where protein ranged from 76-310 mg% and glucose ranged from 7-49 mg%. In these cases L.A. levels were below 6.0 meq/L and no patient received antibiotic therapy or later developed septic meningitis.

For laboratories that currently use automated procedures such as the DuPont ACA method for stat CSF assays, the addition of L.A. poses no additional technologist time and is most valuable in determining the presence of an antibiotic treatable meningitis. Clinically, lactic acid levels are a most useful aid in deciding whether or not to terminate antibiotic therapy against a clinically microbial spectrum in the face of equivocal parameters of septic meningitis.

REFERENCES

1. Killian JA, Nishimura K: Lactic acid of normal and pathological spinal fluids. *Proc. Soc. Exp. Biol. Med.*, 23:255-257, 1925.
2. Prockop LD: Cerebrospinal fluid lactic acid. *Neurology*, 18:189-196, 1968.
3. Bland RD, Lister RC, Ries JP: Cerebrospinal fluid lactic acid and pH in meningitis. *Am. J. Dis. Child.*, 128: 151-157, 1974.
4. Brook I, Bricknell KS, Overturf GD, Finegold SM: Measurement of lactic acid and cerebrospinal fluid of patients with infections of the central nervous system. *J. Infec. Dis.*, 137(4): 384-390, 1978.

NEWS NOTES

Collective Bargaining Gets Nod

Housestaff physicians won a court decision which, in effect, gives them the right under federal law to organize formally and engage in collective bargaining. The U.S. Court of Appeals in Washington, D.C. ruled that the National Labor Relations Board was wrong in 1976 when it decided that interns and residents are students, not employees, and therefore not entitled to form unions under protection of the federal law.

Cost of Fringe Benefits Rising

MEDICAL ECONOMICS reports that a new federal law requires that health insurance and disability benefits for pregnancy and childbirth be paid on the same basis as other medical conditions. That will mean sharply higher costs for doctors employing 15 or more assistants and a further increase in the mounting tab physicians must pay for employee fringe benefits.

A recent U.S. Chamber of Commerce survey of businesses found that vacations, pensions, and similar benefits received by employees last year had an average value of $4,700—an increase of 18% since 1975.

CAPD Explained in New Film

"Continuous Ambulatory Peritoneal Dialysis (CAPD)" is the subject of a new training film. The title of the film is "A Life to Live: New Freedom Through CAPD." It was produced under the auspices of the Texas Department of Health, is made either in film form or as a videocassette, and can be purchased for $310 per print. Preview prints may be obtained for purchase consideration from New Day Productions, P.O. Box 13245, Capitol Station, Austin, Tex. 78711.

'Senior Citizens of the Year'

Two southern Indiana physicians who served together during World War II, but who hadn't seen each other since then, met again in Fort Wayne May 21—as finalists in the annual Older Hoosier of the Year contest, sponsored by the Indiana Commission on the Aging and Aged.

Dr. E. Briscoe Lett, 69, of Loogootee earlier had been chosen Martin County's "Senior Citizen of the Year" while Dr. Dale D. Dickson, 72, of Greensburg, a retired physician and artist, had been selected for the same honor in Decatur County.



DR. LETT



DR. DICKSON

Both physicians attended school together at Randolph Field, Texas during World War II, both going on to serve as flight surgeons with the Army-Air Force medical corps. That was the last time they had seen each other. About 15 years earlier, they both had been students at Franklin (Ind.) College.

Dr. Lett, who has practiced medicine in Loogootee 44 years, is a 1934 graduate of the University of Louisville Medical School. He has devoted his life to the physical, mental and material benefits of the residents of Martin and surrounding counties. He often remarks he will treat "the skin and its contents" of anyone who needs help—even when he knows they will be unable to pay.

Dr. Dickson began his medical career after being graduated cum laude from the Indiana University School of Medicine in 1933. Semi-retired since 1976, he has continued making house calls and visiting shut-ins and nursing home residents. He also remains active with the Boy Scouts of America, his church, missionary work in Haiti and Kenya, the Decatur County Artists Association, and a variety of hobbies.

The Older Hoosier of the Year title is the highest honor bestowed by the Indiana Commission on aging. Its purposes are to recognize an older Hoosier for a lifetime of service, to encourage continued achievement and to interpret to the public the pleasures and challenges of "the later years."

Both Doctors Lett and Dickson were among 16 finalists chosen for the competition. Dr. Garet G. Eppley of North Manchester won the title last year and Dr. Jessee L. Dickinson of South Bend won it in 1977.

Facing Major Business Decisions?
Your CPA can help.

A Certified Public Accountant can ease the burden of your most important decisions.

Should you incorporate? Which retirement plan is best for you? Should you lease or buy office space and equipment? What should a partnership or employment agreement include? Making financially sound decisions in these and many other areas is vital to a successful medical practice.

The CPA has tackled these questions before. To make maximum use of your resources, and to minimize taxes, consult a professional—your CPA.



Certified Public Accountants
perform the full range of accounting services

CPA
More than a title, it's a profession

Indiana Association of Certified Public Accountants, Inc.
921 E. 86th Street, Suite 102, Indianapolis, Indiana 46240, 317-257-6284

NEWS NOTES

AMA-ERF Aids I.U. Med Students

More than 4,000 medical students and young physicians-in-training borrowed $5.8 million last year through the AMA-ERF student loan guarantee program.

Since 1962, when the AMA Education and Research Foundation's loan program was established, students and physicians-in-residence at the I.U. School of Medicine have received 1,471 AMA-ERF loans totaling nearly $1.8 million. Last year the ISMA allocated in contributions more than $22,000, the equivalent of $5 per dues-paying member, to the AMA-ERF for its loan program to medical students.

"The program of aid dramatically affirms medicine's financial investment in and unselfish support of the future of high quality health care in America," said Donald F. Foy, ISMA executive director. "Physician-contributors and Auxiliary-member spouses deserve special recognition for their dedication to the program through supplementary gifts which increase the amount of loan funds available."

Another AMA-ERF program is its unrestricted, direct grants made to medical schools throughout the U.S. In March more than $1.3 million was channeled to medical school deans, with I.U. receiving the second largest grant, $41,427.

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Immediate delivery on many 1979 models

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594



Barbara Quickstad (right), AMA Auxiliary AMA-ERF chairman, chats with Governor Otis R. Bowen, M.D., his wife Beth (left), and Ruth Gattman, immediate past president of the ISMA Auxiliary, at a champagne reception hosted by the 13th District Medical Society during the Auxiliary's annual meeting in Goshen this spring.

ELKHART TRUTH PHOTO

Ossian Medical Center

A new office building to be occupied by the Ossian Medical Center is now under construction in Ossian. The Center will accommodate three or four physicians and will be ready for occupancy in about six months. The parent medical facility for the Ossian satellite is the Caylor-Nickel Medical Center of Bluffton. A second satellite operation will soon be opened in Celina, Ohio. The Ossian Center is functioning at present in the office of Dr. Wayne Hardin, who has practiced for 39 years in Ossian.

Bone Marrow Bank

A bone marrow bank is maintained in Houston at the M. D. Anderson Hospital and Tumor Institute. Patients donate bone marrow cells when their disease first disappears after treatment. The cells are frozen and stored for use later in case the tumor recurs. Each patient receives his own cells and avoids any problem of incompatability. The program is especially adapted to leukemia treatment. The normal cells may be separated from leukemic cells and, when frozen, can be stored for three to five years.

Physician Fee Guidelines

"Physician Fee and Cost Indicators," a booklet presenting a step-by-step method to help physicians manage their practices more efficiently and restrain fee increases, has been distributed by the AMA. It appeared as an insert in the May 18 issue of AMERICAN MEDICAL NEWS. Copies are available from the AMA Order Dept., P.O. Box 821, Monroe, Wis. 53566.

NEWS NOTES

Drug Abuse Booklets

The Channing L. Bete Company sells drug abuse informational booklets. Among them are "Parents and Drug Abuse," "Drugs and You" and "Drug Abuse." They are available in any quantities, and may be personalized by printing a name and a special message on the cover. A self-contained reading rack with 100 copies of each of eight brightly colored scriptographic fact folders also may be purchased. For details write to the company at 45 Federal Street, Greenfield, Mass. 01301.

Office Surgery Experiment

The ISMA Board of Trustees, meeting May 6, directed the Commission on Medical Services to continue working with Blue Cross-Blue Shield on their recommended categories for possible procedures to be performed as part of the Office Surgery Experiment. BC/BS recommends that the following surgical procedures be allowed in a physician's office: endoscopies, excisions and biopsies, fractures, incisions and sutures, D&Cs and laparotomies, myringotomies, rhinoplasties, eye surgeries, circumsion, tonsils and adenoids, and vasectomies.

5 Reasons Why INDIANA DOCTORS Recommend HANGER Prostheses...

1. HANGER is the oldest and largest prosthetic manufacturer in Indiana.
2. More people in Indiana wear HANGER Prostheses than any other make.
3. The HANGER organization has more employees and more certified fitters than any other prosthetic manufacturer.
4. HANGER wearers are guaranteed HANGER service and repairs at 39 HANGER offices in leading cities.
5. HANGER research is working actively on new prosthetic developments for the benefit of all amputees.

Hanger PROSTHESIS

Court Action

Hospital May Require Physician Staff Members To Maintain Professional Liability Insurance

A hospital may require its physician staff members to maintain professional liability insurance, an Indiana appellate court ruled.

The hospital's bylaws require all physician staff members to carry professional liability insurance coverage. The private, not-for-profit hospital terminated a physician as a member of its medical staff because he failed to obtain the required insurance. He filed suit against the hospital, its Board of Trustees and the Executive Committee of its medical staff seeking an injunction and damages. A trial court entered judgment against the physician and he appealed.

Affirming the decision, the appellate court said that the trial judge, who was the father-in-law of one of the hospital's attorneys, did not lose jurisdiction over the suit by not disqualifying himself. The appellate court said that the physician gave implied consent to jurisdiction of his case because he did not raise the issue until more than eight months after he became aware of the relationship between the judge and the attorney. The physician failed to show that there was any state action involved in the decision to require liability insurance, and therefore, it was not subject to due process requirements.

The court said that the requirement of insurance was substantively valid for the orderly management of the hospital and the protection of patients. The hospital had sufficiently complied with its procedures for amendment of the bylaws, even though a special committee recommended that the insurance question should be left to each physician, the court concluded.—*Renforth v. Fayette Memorial Hospital Association, Inc.*, 383 N.E.2d 368 (Ind. Ct. of App., Dec. 12, 1978)

Courtesy of THE CITATION, April 1, 1979.

NEWS NOTES

'Health A-V Guide'

An expanded and completely updated second edition of "Educator's International Guide to Free and Low Cost Health Audio-Visual Teaching Aids" has just been released. To obtain it send $11 to Pharmaceutical Communications, 42 Crescent St., Long Island City, New York 11101 and ask for "Health A-V Guide."

Paper Wins Contest

A scientific paper by Dr. William R. Keye, co-authored by Dr. Patricia Bader and Paul Creason, all of the Caylor-Nickel Medical Center, has won a contest sponsored by the Indiana Obstetrical and Gynecological Society. Dr. Keye described the use of blood tests to determine hormone levels in women who are unable to become pregnant. His paper will be submitted for publication in the AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY.

Here and There . . .

. . . **Dr. Howard C. Jackson** of Madison has been named a diplomate of the American Board of Family Practice.

. . . **Dr. Karl L. Manders** of Indianapolis, Marion County coroner, has been elected president of the Indiana Coroners Association.

. . . **Dr. John R. Crist** has been elected president of the medical staff, Deaconess Hospital, Evansville. **Dr. Kenneth L. Nachtnebel** was named secretary-treasurer.

. . . **Dr. William C. Shriner** of Terre Haute has been elected chairman of the Subarea 1 Advisory Council of the Southern Indiana Health Systems Agency (SIHSA).

. . . **Dr. James B. Nelson** of Fort Wayne has been elected to Fellowship in the American Academy of Allergy.

Survey Results Due

ISMA Insurance Company Possible

Preliminary results of an insurance survey to determine the feasibility of forming an ISMA for-profit life insurance company will be presented to the Board of Trustees at its regular meeting in Indianapolis July 15.

Although on May 6 the Board directed the Subcommission on Insurance to proceed with a formal survey of ISMA members to determine the feasibility of forming a for-profit insurance company, an action originally authorized by ISMA Resolution 73-22, actual incorporation of such a company could not take place without affirmation of the 1973 resolution by this year's House of Delegates, according to Bob Sullivan, Director of Medical Services and Insurance.

Such a company will provide a vehicle to increase ISMA membership benefits by making available a variety of important coverages, such as group term, disability income, in-hospital indemnity, business overhead expenses, and even high-limit accident policies, Sullivan said. He added that the company also will be able to tailor these programs to meet the needs of Indiana physicians at a lower premium by writing a "group plan" and by keeping overhead expenses at a minimum through proper management.

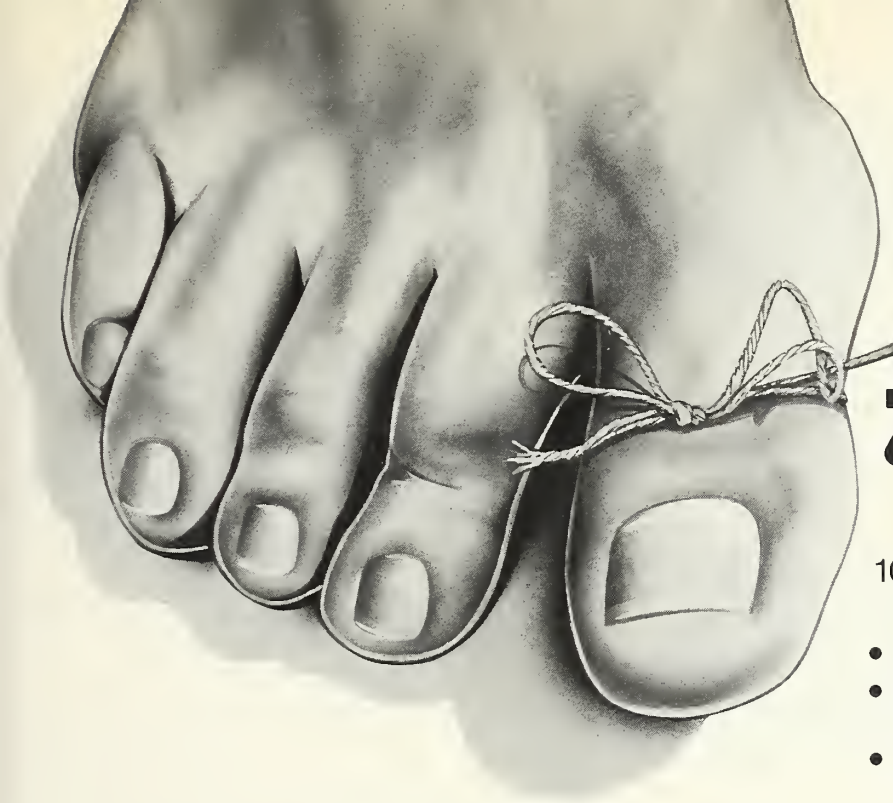
In addition, the company would create a financial and mechanical base upon which to create a market for medical professional liability insurance for ISMA members should the need arise, Sullivan said. Insurance industry experts predict, based on current professional liability loss trends, that another "malpractice crisis" could arise in the early-to-mid-1980s.

An insurance survey, part of the formal feasibility study, was mailed to all ISMA physicians last month.

In explaining its recommendation to conduct a feasibility study to form a life insurance company instead of a professional liability company, the Subcommission on Insurance, chaired by Dr. H. Marshall Trusler of Indianapolis, reported that research over the past several months has indicated that the absence of a great demand for professional liability insurance would make formation of such an insurance company difficult.

Without sufficient numbers of policyholders, Dr. Trusler said, a company writing only professional liability insurance would not possess a high degree of financial stability. Life insurance companies, on the other hand, have a proven track record for profitability, he said, and a successful ISMA life company would provide a mechanism for rapid establishment of a professional liability company.

The Subcommission is being assisted in the study by the Physicians Insurance Company of Ohio (PICO), formed by the Ohio State Medical Association in 1976.



A reminder

ZYLOPRIM®

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim® (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

CONTRAINDICATIONS: Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.

WARNINGS: ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol® (mercaptopurine) or Imuran® (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

Usage in Pregnancy and Women of Childbearing Age: Zyloprim® (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

PRECAUTIONS: Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or subnormal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

ADVERSE REACTIONS:

Dermatologic: Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.
Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.
A few cases of alopecia with and without accompanying dermatitis have been reported.
In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

Gastrointestinal: Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

Vascular. There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

Hematopoietic: Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim® (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

Neurologic: There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

Ophthalmic: There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

Drug Idiosyncrasy: Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

OVERDOSAGE: Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

HOW SUPPLIED: 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

PHYSICIANS' DIRECTORY

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

INTERNAL MEDICINE

Offices for the doctors listed below are located at 3130 N. Meridian St., Indianapolis 46208; the switchboard number is 317-927-1221.

MERIDIAN MEDICAL GROUP

CARDIOLOGY
Richard M. Nay, M.D.
Warren E. Coggeshall, M.D.
Richard R. Schumacher, M.D.
William C. Elliott, M.D.

HEMATOLOGY—ONCOLOGY
Laurence H. Bates, M.D.
William M. Dugan, M.D.
James E. Schroeder, M.D.
Frank A. Workman, M.D.
Deborah S. Provisor, M.D.
Pediatrics

METABOLISM AND ENDOCRINOLOGY
William M. Holland, M.D.

GASTROENTEROLOGY
Robert D. Pickett, M.D.
B. T. Maxam, M.D.
Lee G. Jardan, M.D.
Martin P. Meisenheimer, M.D.

INTERNAL MEDICINE
Hunter A. Soper, M.D.
Douglas H. White, Jr., M.D.
Michael B. DuBois, M.D.
Nephrology
Michael P. Bubb, M.D.
Robert L. Iverson, Jr., M.D.
Critical Care
Michael Zeckel, M.D.
Infectious Diseases

INFECTIOUS DISEASES
Thomas G. Slama, M.D.

NEUROLOGY
Norman W. Oestrike, M.D.
Charles Rehn, M.D.

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Ahearn, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegeman, M.D.
Douglas F. Johnstone, M.D.
LeRoy H. King, Jr., M.D., FACP

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capitol, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurological Surgery

1815 North Capitol Avenue Indianapolis 46202

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY
5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Training for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

CLINICAL, ANATOMIC PATHOLOGY

THE MEDICAL LABORATORY
OF
DRS. THORNTON, HAYMOND, COSTIN, BUEHL, BOLINGER & WARNER

301 EAST 38th ST., INDIANAPOLIS, INDIANA 46205

Phone: (317) 925-6466

COMPLETE LABORATORY SERVICES

H. C. Thornton, M.D. (1902-1978)
J. L. Haymond, M.D., F.C.A.P.
R. L. Costin, M.D., F.C.A.P.
I. A. Buehl, M.D., F.C.A.P.
G. L. Bolinger, M.D., F.C.A.P.
T. M. Warner, M.D., F.C.A.P.
F. D. McGovern, Jr., M.D., F.C.A.P.
R. O. McClure, M.D., F.C.A.P.
R. P. Hooker, M.D., F.C.A.P.

- MICROBIOLOGY
- CHEMISTRY
- SURGICAL PATHOLOGY
- HEMATOLOGY
- COAGULATION
- FORENSIC
- CYTOLOGY
- EKG
- VETERINARY PATHOLOGY
- TOXICOLOGY
- HOUSE CALL PHLEBOTOMY
- COURIER SERVICES

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
THOMAS L. McCONNELL, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

DAVID L. PHILLIPS, M.D.
JOHN J. SAALWAECHTER, M.D.
BEN H. PARK, M.D.

Individualized Treatment for Alcoholism

KOALA CENTER



1711 Lafayette Avenue
Lebanon, Indiana 46052

(317) 482-3711

OPHTHALMIC PLASTIC SURGERY

Robert D. Deitch, M.D., F.A.C.S.

Fellow of the American Association of
Ophthalmic Plastic and Reconstructive Surgery

St. Francis Medical Arts Building
1500 Albany Street Suite 801
Beech Grove, Indiana 46107

PHONE ANSWERED 24 HOURS (317) 783-6187

CARDIOLOGY

WILLIAM K. NASSER, M.D.
MICHAEL L. SMITH, M.D.
CASS A. PINKERTON, M.D.

Cardiology and cardiac catheterization

8402 Harcourt Road, Room 413 **Indianapolis 46260**
St. Vincent's Professional Building **(317) 257-9316**
Physician Referral Only

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.

Certified: American Board of Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons
Specializing in Colon and Rectal Surgery

214 Sherland Building
105 East Jefferson Blvd. South Bend, Ind. 46601

HAND SURGERY

By appointment Phone 317-783-1319

VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.

Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery

3530 S. Keystone, Suite 305 Indianapolis 46227

PSYCHIATRY

GORDON T. BROWN, M.D.

Diplomate, American Board of Psychiatry and Neurology
Adult and Adolescent
Psychotherapy, Consultation, Evaluation

Tel: (317) 923-3269
3266 North Meridian Street Indianapolis 46208

OBITUARIES

Carl M. Marsh, M.D.

Dr. Marsh, 63, an Indianapolis family physician, died May 8 at Community Hospital, Indianapolis.

A 1950 graduate of the Indiana University School of Medicine, he was a former director of education at Methodist Hospital, where he had served his internship.

Leland K. Phipps, M.D.

Dr. Phipps, 84, a retired Union City physician, died May 16 at Union City Memorial Hospital.

He was a 1920 graduate of the Indiana University School of Medicine, a senior member of the ISMA, and a member of the ISMA's 50-Year Club.

Dr. Phipps, a Navy veteran of World War I, practiced medicine in the Union City area for 50 years.

Roscoe S. (Rusty) Saylor

Mr. Saylor, 86, former executive-president of Indiana Blue Shield, died May 27 in Methodist Hospital, Indianapolis.

He retired in 1966 after 19 years with Indiana Blue Shield. At the time of his retirement, he was credited with building the state Blue Shield plan into "one of the best plans in the country." While he was head of the plan, the company's membership grew from just over 140,000 to more than 1.5 million.

Mr. Saylor, a former vice president of the National Association of Blue Shield Plans, became president of the California Blue Shield Plan after leaving his Indiana post. He was active in the Indiana Health Council and on the Joint Committee for Improvement of Patient Care in Indiana.

Alfred J. Niedermayer, M.D.

Dr. Niedermayer, 67, an Evansville physician, died May 13 at Welborn Memorial Baptist Hospital, Evansville.

He was a 1940 graduate of the Indiana University School of Medicine.

A native of Berlin, Germany, he was in private practice until earlier this year. From 1940-43 he was head of medicine and surgery at the Evansville State Hospital and then was associated with the Welborn Clinic. He was a past president of the Welborn Hospital medical staff.

Dr. Niedermayer was a member of the American Academy of Family Physicians and the Scientific Research Society of North America.

Marcus M. Gilman, M.D.

Dr. Gilman, 82, originally of South Bend, died May 20 at Bergenfield, N.J., where he was visiting.

He was a 1924 graduate of the Indiana University School of Medicine. He moved to North Miami Beach, Fla., in 1970.

Dr. Gilman was a senior member of the ISMA and was enrolled in its 50-Year Club in 1974.

Russell A. Gilmore, M.D.

Dr. Gilmore, 87, a Michigan City physician, died May 27 at St. Anthony Hospital.

He was graduated from the University of Illinois Medical Department in 1916. He served with the Army in France during World War I.

Dr. Gilmore began practicing in Michigan City in 1920 and was the oldest practicing physician in La-Porte County at the time of his death. A senior member of the ISMA, he joined the 50-Year Club in 1966.



McClain Car Leasing, Inc.

1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

PHYSICIAN WANTED—Opportunity exists for young family proctitioner to set up office in new medicol complex, westside Indianopolis, 38th St. at I-465. My office presently has oversized woiting room ond business office allowing for second office on opposite side and sharing of overheod expenses. Call 317-247-0300, 8:30-4:30 except Wednesdoy and Saturdoy until noon only.

IMMEDIATE OPENING for full-time (40-hour week) Indiana licensed physician in training center for mentally retarded. Fringe benefits include health and life insurance, excellent retirement program, accumulative sick and vacation leave. Rotate night and weekend "call" with four other physicians compensated by time off. (Will consider one-half time, mornings only.) For further information or application, contact George Smith, Personnel Director, Fort Wayne State Hospital and Training Center, 4900 St. Joe Road, Fort Wayne, Ind. 46815. Tel: (219) 485-7554.

FOR SALE: One 21-inch examination table with matching treatment table, and one orthoscope with table. Contact Mrs. Charles Alvey, 4300 University, Muncie, Ind. 47304. Tel: (317) 289-6722.

WANTED: PHYSICIAN with empathy toward college-age population to practice general medicine in 38-bed accredited hospital with a large outpatient clinic. Salary negotiable, excellent fringe benefits. Contact Loyal W. Combs, M.D., Director, Purdue University Student Hospital, West Lafayette, Ind. Tel: (317) 749-2441. Equal access/equal opportunity employer.

FOR SALE: Electrofile, seven tray, complete, used one year, best offer. Snowhite Reid Medical Corp., 513 N. River Drive, Marion, Ind. Tel: (317) 664-3981.

OCCUPATIONAL MEDICINE—Medical Director for the appliance component business division of General Electric Co. headquartered in Ft. Wayne, Ind. Directing headquarters staff of 7 nurses, 2 part-time physicians, technician, secretary and 3 industrial hygienists plus brand new computerized health/hygiene/safety recordkeeping system and administrator for same. Also have policy/administative responsibility for 14 additional plants through Midwest and South. Salary and benefits excellent; Ft. Wayne 200,000 pop. and great place to raise a family. Industrial experience helpful but not essential. Equal Opportunity employer. Contact E. B. O'Hora, Manager, Professional Relations, c/o General Electric Co., Ft. Wayne, Ind. 46804.

LOCUM TENENS—EMERGENCY MEDICINE—available in our 100 hospitals; monthly scheduling is flexible and according to your preferences; malpractice is paid, excellent hourly income according to your flexibility and hours worked. Call toll free 1-800-325-3982, ext. 220 for details.

MICHIGAN CITY, INDIANA—Emergency Department Director; flexible scheduling. Excellent income—$57,000 to $65,000. Paid malpractice insurance. Contact T.P. Cooper, M.D., 970 Executive Parkway, St. Louis, Missouri 63141, or call toll free 1-800-325-3982.

PHYSICIAN WANTED: Residency-trained, board-certified Family Physician to join well established four-man family practice group. Spacious office building across the street from well equipped hospital. Small midwest town in proximity to Indianapolis and Chicago. If interested, please reply to Kenneth J. Ahler, M.D., 1103 E. Grace St., Rensselaer, Ind. 47978.

OPPORTUNITIES FOR PHYSICIANS—There are current openings among the Indiana State Hospitals at various locations throughout the State for psychiatrists and physicians of other specialties, at most experience levels. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, Ky. 42071 or call (collect) (502) 753-9772. Forrest is retained by the Indiana Department of Mental Health.

CHICAGO AREA EMERGENCY MEDICINE PRACTICE. Progressive 250-bed hospital in community situated outside congested metropolitan area. ACLS certificate or comparable proficiency level required. Excellent minimum guarantee, flexible rotations, and superb malpractice program. For details, call Bill Salmo at 1-800-325-3982, toll free.

CHICAGO AREA EMERGENCY DEPARTMENT DIRECTORSHIP. Progressive 250-bed hospital in community situated outside congested metropolitan area. Emergency Medicine experience and ACLS certificate, or comparable proficiency level required. Excellent minimum guarantee with directorship bonus, flexible rotations, and superb malpractice program. To inquire, call Bill Salmo at 1-800-325-3982, toll free.



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

sa unique thot we hove over $4,000,000.00 in personol loans mode to Physicions ond Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect coll is oll thot's necessary to begin processing your loon. We will come to your home, office or hospitol to close your loon at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loon, it con be repaid in varying amounts ond on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Calin G. Hozo
Assistant Vice President
110 East Woshington Street
Indianopolis, Indiono 46204
Phone (317) 631-1311

Indianapolis Morris Plan

ADVERTISERS IN THIS ISSUE

July 1979 Vol. 72 No. 7

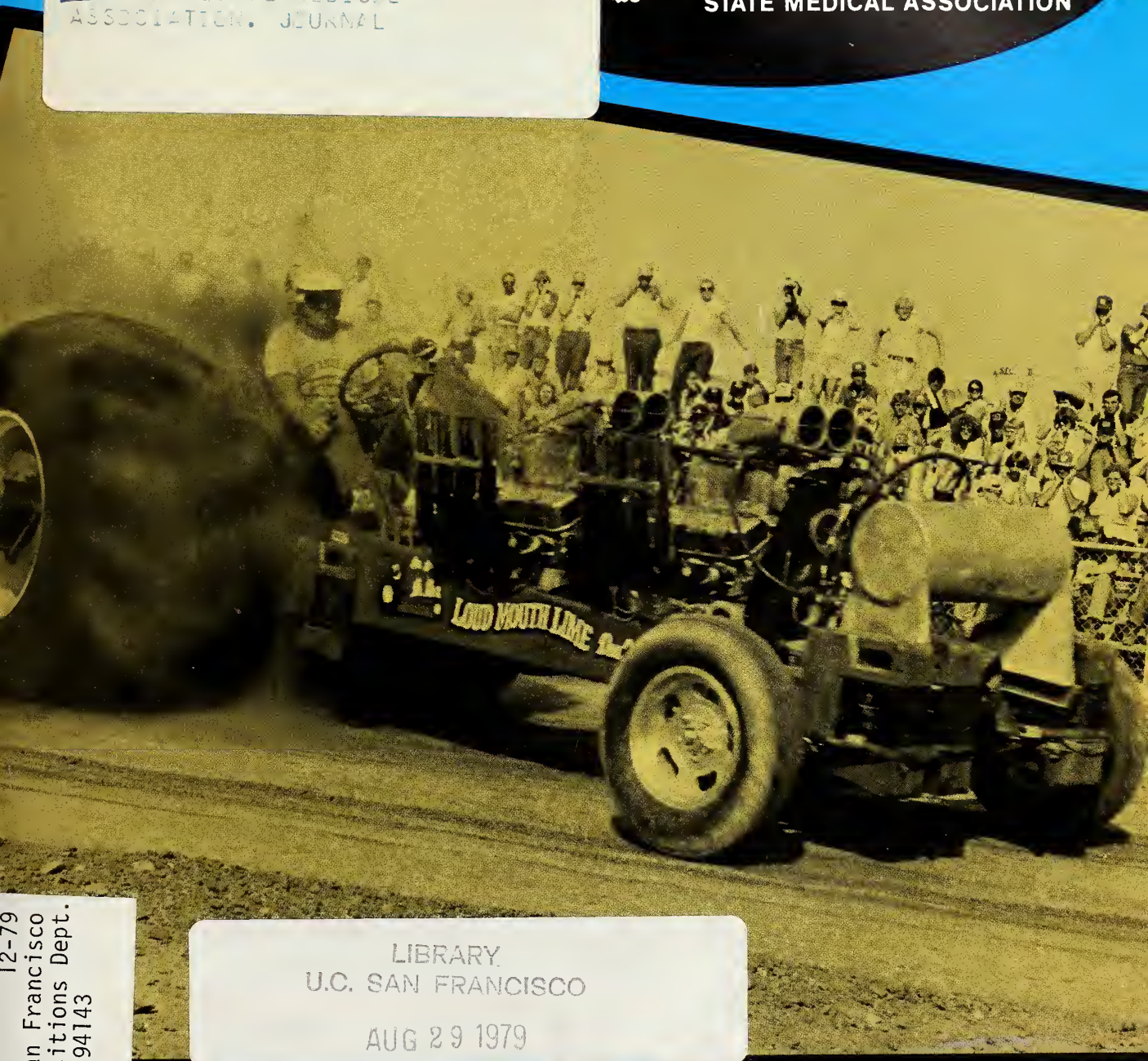
Americana Healthcare Center 517
Beltone Electronics Corp. 507
Blue Cross-Blue Shield 493
Brown Pharmaceutical Co., Inc. 519
Burroughs Wellcome Co. 537
Campbell Laboratories, Inc. 494
Commercial Announcements 541
Dave Waite Leasing 506
Eli Lilly and Company 495
Hanger Protheses 535
Immke Circle Leasing, Inc. 534
Indiana Assn. of CPAs, Inc. 533
Indiana Medical Bureau 527
Lifeguard Systems of Indiana 509
McClain Car Leasing, Inc. 540
Mead Johnson Pharmaceutical Div. 511-514
Medical Protective Co. 520
Merck Sharp & Dohme 498
Merrell-National, Inc. 498-499
Morris Plan 542
P&SLI 503
Physicians' Directory 538
Porsche + Audi 497
Professional Careers Institute 515
Roche Laboratories Covers, 502
Smith, Kline & French 501
Upjohn Company 500
U.S. Air Force 505

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted. stated or implied by the association.

August 1979 • Vol.72 • No.8

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

INDIANA STATE MEDICAL ASSOCIATION. JOURNAL

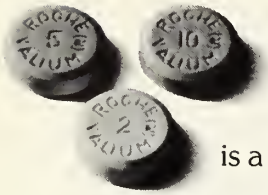


LIBRARY
U.C. SAN FRANCISCO
AUG 29 1979

J-P 12-79
U of California, San Francisco
The Library, Acquisitions Dept.
SAN FRANCISCO, CA 94143



A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own. Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium® (IV)
diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

a prudent choice in psychic tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

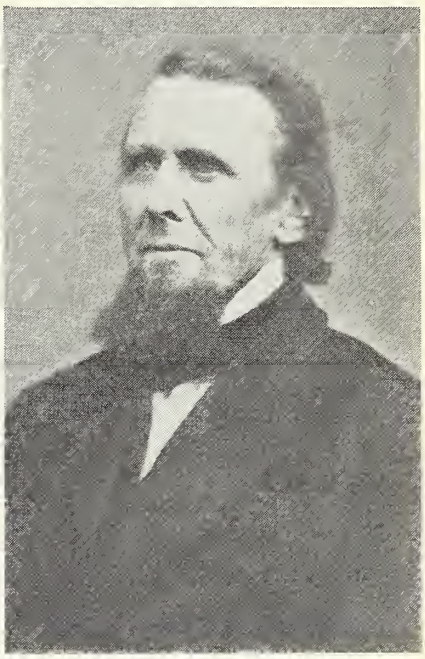
Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis



Governor John Evans, M.D.

John Evans, M.D. 1814-1897

THE ST. LOUIS, Missouri County Medical Society has long been interested and active in preserving its regional medical heritage. The Society maintains a museum, open to the public, which features numerous exhibits. One such exhibit is a turn-of-the-century hospital pharmacy, complete with an elaborate, decorative wood facade, jars, scales, and other apparatus from the old St. Vincent's Hospital in Indianapolis.

Recently, the Society has developed an interest in creating an All American Medical Hall of Fame, to be located in St. Louis. A four-page newsletter entitled "The Fame Thrower," describing the progress of the endeavor, is sent to various state medical associations several times per year.

The plan is to feature a limited number of physicians for each state, and, where appropriate, from each of the various specialty organizations. To date, selections for the states range from one (Louisiana and Montana) to eight (Massachusetts). The suggested number per state was three. Indiana submitted four names—John Shaw Billings, M.D., Harvey Wiley, M.D., John Stowe Bobbs, M.D., and Frank B. Wynn, M.D.

Most of the nominees from the other states are physicians whose names and deeds are not generally known. Many names, however, are quite familiar, such as Oliver Wendell Holmes, M.D., and George Minot, M.D., of Massachusetts, Crawford W. Long, M.D., of Georgia, Ephraim McDowell, M.D., of Kentucky, William Beaumont, M.D. and Evarts Graham, M.D., of Missouri, and Benjamin Rush of Pennsylvania. Daniel Drake, M.D., appears in the lists of both Ohio and Kentucky.

Some names are conspicuous by their absence. It was surprising, for example, to note that John Evans, M.D., was not mentioned. Evans' career extended across three states, Indiana, Illinois, and Colorado (Medical Museum Notes, February 1977). He was the prime mover in developing Indiana's medical health system in the 1840s, an activity that caused him to be elected to Indiana's Hall of Fame, when that institution was created several years ago. He was a leading figure in teaching and organizing medicine in the early years of Chicago, and among numerous achievements there founded Northwestern University. He moved to Denver, Colorado, became territorial governor, founded another university, built railroads, became a rancher, and developed a sufficient reputation to merit recognition in the Cowboy Hall of Fame at Oklahoma City, Oklahoma. He was a unique, multi-talented individual. Had he confined his interests to medicine only, and had he remained in either Indiana or Illinois, his name would undoubtedly now be among those of the All American Medical Hall of Fame.

Photo courtesy of the State Historical Society of Colorado.

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Vol. 72, No. 8
AUGUST 1979

USPS 284-440
ISSN 0019-6770

Editorial & Advertising Office:
3935 N. Meridian St.,
Indianapolis, Ind. 46208

EDITOR
Frank B. Ramsey, M.D.
MANAGING EDITOR
Martin T. Badger
BUSINESS MANAGER
Donald F. Foy

CONSULTING EDITORS
Charles A. Bonsett, M.D.
A. W. Cavins, M.D.
Samuel R. Mercer, M.D.
Lall G. Montgomery, M.D.
W. D. Snively, M.D.
I. W. Wilkens, M.D.

EDITORIAL BOARD
Elton Heaton, M.D.
Rodney A. Mannion, M.D.
(Terms expire Dec. 31, 1979)
Alvin J. Haley, M.D.
Wei-Ping Loh, M.D.
(Terms expire Dec. 31, 1980)
Steven C. Beering, M.D.
Paul S. Rhoads, M.D.
(Terms expire Dec. 31, 1981)

THE JOURNAL of the Indiana State Medical Association is published monthly in the interests of the medical profession of Indiana. No copyright claimed. Copyright rests solely with authors, who are responsible for statements made in their articles. Views expressed do not necessarily reflect the opinions of the editors. Scientific and editorial contributions are accepted for exclusive publication, subject to editorial requirements.

All issues since 1967 available on microfilm from University Microfilms, Inc., 300 N. Zeeb Rd., Ann Arbor, Mich. 48106. Indexed in Index Medicus and Hospital Literature Index.

Advertising rates and data available on request. Representative for national advertising: State Medical Journal Advertising Bureau, Inc., 711 South Blvd., Oak Park, Ill. 60302.

Publication deadline: 1st day of month preceding month of issue.

Subscriptions: $14 per year, USA; $16, Canada; $17, foreign; $12, libraries; $10, senior ISMA members; $8, members; except for special issues, single copies not available. Subscriptions renewable only in January and July.

Second-class postage paid at Indianapolis Ind. and additional mailing office.

SCIENTIFIC ARTICLES

573 **Urinary Tract Infections in Childhood—**
Eric Yancy, M.D.
(19th Continuing Medical Education article)

577 **Clinical Notes: Proctology—**
Richard H. Appel, M.D.

578 **Adverse Effects of Oral Contraceptives—**
Swei H. Tsung, M.D.

581 **Vertebrobasilar Insufficiency—**
Peripheral Vascular Conference

586 **The Five Fingers of Cardiology—**
R. Joe Noble, M.D.

588 **Cytoreductive Surgery for Metastatic Testis Cancer (Part 2, Urologic Neoplasia Series)—**
John P. Donohue, M.D.

593 **How to Say It—**
David F. Wehlage, M.D.

SPECIAL FEATURES

550 **Editorial Notes**

553 **Guest Editorial: Capital Punishment**

566 **Nutrition and Obesity**

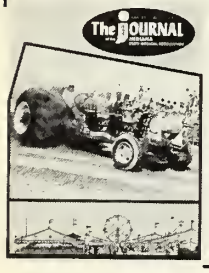
570 **Dangers of Self-Prescription**

596 **Court Action**

605 **Humanitarian Award to Mrs. Bowen**

DEPARTMENTS, MISCELLANEOUS

543 **Medical Museum Notes**
546 **What's New?**
554 **Auxiliary Report**
556 **Future File**
560 **Cancer Corner**
565 **There's a Word for It**
597 **CME Quiz**
598 **Book Reviews**
601 **News Notes**
610 **Obituaries**



ABOUT THE COVER

Tractor pulls, rodeos, auto races, horse races and motorcycle races are among the spectator events that will draw about 1.5 million people to this year's Indiana State Fair. The fair, conducted on the Indiana State Fairgrounds, Indianapolis, will run Aug. 16-26.
INDIANA STATE FAIR OFFICIAL PHOTO

We specialize in protecting your financial health



By providing immediate capital and professional counsel

You can rely on Professional Capital Corporation for two important reasons. First, you can receive from $10,000 to $100,000 quickly and confidentially. You'll appreciate our convenient service, competitive rates and extended payment program.

Secondly, you can benefit from expert advice concerning tax shelters, strategic investments and new tax laws that work to your advantage. Since we serve your profession exclusively, we know how to help you plan a secure financial future.

To protect your financial health, please call the toll-free number below; in California, call collect (213) 475-8579.

(800) 421-2321

PROFESSIONAL
CAPITAL CORPORATION
10880 Wilshire Boulevard, Los Angeles, CA 90024

Serving physicians and dentists exclusively

WHAT'S NEW?

The Matsushita Electric Corporation of America announces a new conductive hearing aid that sends sound waves directly to the inner ear. An ultra-small microphone, amplifier, battery and vibration mechanism is built into the frames of special eyeglasses and converts sound waves into mechanical vibrations. These are transmitted to the bone behind the ear. Patients without eardrums or with defective eardrums are able to hear if the inner ear is functional.

* * *

Wallace Laboratories has begun marketing MICRAININ®, a combination drug with meprobamate and aspirin. It is intended for relief of tension headache. Double blind clinical testing shows that MICRAININ is effective in relieving acute episodes.

* * *

Medical Technology Corporation is marketing a new urine culture system. Named URICULT®, the system consists of a dip-slide, coated on both sides with culture media. After it is dipped into a urine specimen, it is incubated. The colony count is determined by comparing the slide with density charts, which are provided.

* * *

Bio/Data Corporation has a new kit called BETA/PAK™, which will identify classical von Willebrand's disease and differentiate it from mild hemophilia, as well as some of the von Willebrand's syndrome variants. The three reagents, Ristocetin, ADP and Collagen, are contained, with their respective diluents, in one convenient kit. A copy of a new booklet, "Fundamentals of Platelet Aggregation," will accompany each order received during the introductory period.

* * *

Stuart Pharmaceuticals announces that Nolvadex® (tamoxifen citrate), a nonsteroidal antiestrogen for the palliative treatment of advanced breast cancer in postmenopausal women, is now available in a new larger package size of 250 10 mg. tablets. In the first year of use Nolvadex® has recorded approximately 30,000 women who have had a positive therapeutic response.

* * *

Armour has a new name for their levothyroxine product. LEVOTHROID™ will identify the product previously known as LETTER®. A tablet containing 0.175 mg has been added to the previous series, since many physicians found this to be a popular dosage for patients who required dosage between 0.15 mg and 0.2 mg. A new feature is a titration pack of 14 tablets each of 0.05 mg, 0.1 mg, and 0.15 mg strengths for determining proper dosage at the beginning of therapy.

The 3M Company makes a transparent surgical drape which preserves the sterile field during use of a C-Arm Image Intensifier in the operating room. The surgeon on the sterile side of the drape can see the Image Intensifier, x-ray technician, anesthetist and other personnel who are on the non-sterile side.

* * *

The Du Pont Automatic Clinical Analyzer ('aca') has added a third anti-epileptic drug test to its program. Primidone can now be analyzed in less than eight minutes. Drug tests for phenytoin and phenobarbital have been on the analyzer since 1978.

* * *

Xerox announces two new copier models. One, the Xerox 2300, is a small desk-top copier that will produce 10 copies per minute. It will work with paper of various sizes from 8½ x 5½ inches up to 8½ x 14 inches and can be used for billing purposes. The other, Xerox 3450, "The Copy Shop," is larger and more versatile. It will do 30 copies per minute.

* * *

Merck Sharp & Dohme has a new package form for Pneumovax, the pneumococcal pneumonia vaccine. It is now available in single-dose prefilled syringes. The new trade package contains five syringes, each filled with one .5 ml. dose of Pneumovax. The vaccine has been demonstrated to be 90% effective against the 14 strains of bacteria that cause over 80% of all pneumococcal pneumonia in the U.S.

* * *

Searle has acquired rights to market a beta-blocker known as bunitrolol in the United States and 68 other countries. Bunitrolol, marketed by C. H. Boehringer Sohn in Germany, is used in treatment of hypertension, angina and arrhythmias. Searle plans to conduct further clinical research.

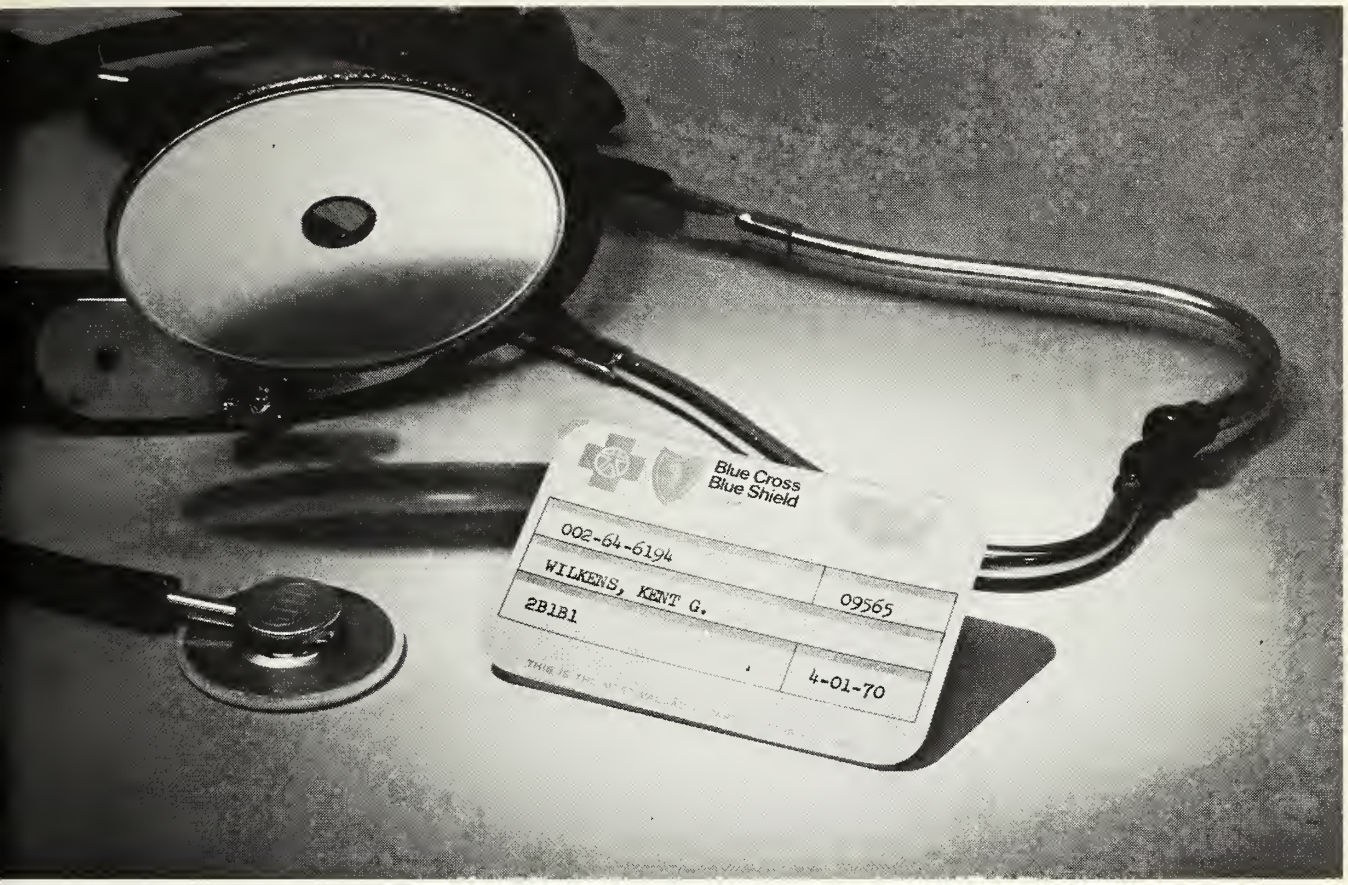
* * *

Midmark Medical announces a new clinical examination table with power-operated adjustments. The height of the table may be varied from 25″ to 36″ to enable patients to mount the table easily. The height may also be adjusted to accommodate the physician and reduce stooping and bending. The table top projects 4 inches past the table base on all four sides. The table adjusts from a horizontal to a full chair position.

* * *

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- One full year in-hospital care
- 100% semi-private room and hospital extras
- Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy
- $250,000 Major Medical Benefits

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Mel Torbeck, Mass Marketing Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4340.

We believe in being better

Blue Cross Blue Shield
of Indiana

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark Nat'l Assn. of Blue Shield Plans

EDITORIALS

Clinical Alternatives To Radical Mastectomy?

"The Treatment of Primary Breast Cancer: Management of Local Disease" was the subject of a Consensus Development Conference at the National Institutes of Health recently.

The big question before the conference was: Are there clinical alternatives to radical mastectomy which minimize patient morbidity and do not decrease a patient's survival potential?

Three surgical techniques were discussed: Conventional radical mastectomy; total mastectomy with removal of axillary lymph nodes and preservation of the pectoral muscles; and lesser surgical procedures such as segmental mastectomy with or without radiotherapy.

Radiotherapy also was discussed as primary treatment of local breast cancer.

In the past the Halsted radical mastectomy has been applied regardless of clinical stage of the disease unless the extent of the disease indicated that it was incurable surgically. However, since more and more women are seen today in Stage I or Stage II of the disease, it was the consensus that the total mastectomy with preservation of the muscles and with lymph node removal is now the standard treatment for Stage I and Stage II patients.

It also was the consensus that a two-step procedure should be done in most cases. A diagnostic biopsy should be with permanent histologic sections before definitive therapeutic measures are recommended.

The question of postoperative radiotherapy was considered by the panel to be a moot question. Further clinical trials will be necessary. Segmental mastectomy was thought to be in the same classification—needs more clinical study.

Further trials are to be had on the subject of primary radiotherapy.

The National Surgical Adjuvant Breast Project (NSABP) protocol was endorsed in regard to answering the question about effectiveness of lesser surgical procedures in women with Stage I and Stage II carcinoma of the breast.

Kennedy's New Health Proposal: More Slogan Than Reality

As their National Health Insurance plan of the year, Senator Ted Kennedy and his helpmates have built a bright-eyed new statue with the same old clay.

The new "Health Care for All Americans" bill differs from his old "Health Security" bill in various particulars but not in basic materials.

Again the public would save on health bills by paying substantially more in tax bills. By the proponents' own estimates, the new federal costs would be $30 billion in 1983, the year targeted for implementation. And as we know, the costs of federal programs—especially social ones—have a facility for growing.

Again there would be the heavy hand of government intervention and regulation.

But instead of being squeezed under, as in the Health

CONTINUED ON PAGE 550

THE INDIANA STATE MEDICAL ASSOCIATION

3935 N. Meridian, Indianapolis 46208—Telephone 925-7545

1979 Annual Meeting—Oct. 13-17—Indianapolis

OFFICERS FOR 1978-79

President—Arvine G. Popplewell, 3530 S. Keystone, Indianapolis 46227

Treasurer—Joseph F. Ferrara, 111 S. Water St., Franklin 46131

Assistant Treasurer—Douglas H. White, 3524 N. Meridian, Indianapolis 46208

Executive Committee—Paul W. Holtzman, Chairman; Arvine G. Popplewell, Joseph F. Ferrara, Douglas H. White, John W. Beeler, Eli Goodman, Alvin J. Haley, Martin J. O'Neill, Members

Speaker of the House—Lloyd L. Hill, 302 N. Duke St., Peru

Vice Speaker—Lawrence E. Allen, 2009 Brown St., Anderson

Executive Director—Mr. Donald F. Foy

TRUSTEES

District	Term Expires
1—John A. Bizal, Evansville	Oct. 1980
2—Harold M. Manifold, Bloomington	Oct. 1981
3—Thomas A. Neathamer, Jeffersonville	Oct. 1979
4—Howard C. Jackson, Madison	Oct. 1980
5—Paul Siebenmorgen, Terre Haute	Oct. 1981
6—Davis W. Ellis, Rushville	Oct. 1979
7—Donald C. McCallum, Indianapolis	Oct. 1980
7—John G. Pantzer, Indianapolis	Oct. 1981
8—Jack M. Walker, Muncie	Oct. 1981
9—John A. Knote, Lafayette	Oct. 1979
10—Martin J. O'Neill, Valparaiso	Oct. 1980
11—Herbert C. Khalouf, Marion	Oct. 1981
12—Alvin J. Haley, Fort Wayne (Chairman)	Oct. 1979
13—Donold S. Chamberlain, South Bend	Oct. 1980

ALTERNATES

District	Term Expire
1—E. DeVerre Gourieux, Evansville	Oct. 197
2—Edgar R. Cantwell, Vincennes	Oct. 198
3—Richard G. Huber, Bedford	Oct. 198
4—Mark M. Bevers, Seymour	Oct. 197
5—William G. Bannon, Terre Haute	Oct. 197
6—Dan W. Hibner, Richmond	Oct. 198
7—I. E. Michael, Indianapolis	Oct. 197
7—Gerald J. Kurlander, Indianapolis	Oct. 197
8—Ted S. Doles, Middletown	Oct. 197
9—Max N. Hoffman, Covington	Oct. 198
10—Leonard W. Neal, Munster	Oct. 198
11—Fred C. Poehler, La Fontaine	Oct. 198
12—Franklin A. Bryan, Fort Wayne	Oct. 198
13—John W. Luce, Michigan City	Oct. 197



Isn't it about time to return stability and profitability to your investments?

You can have both, you know. If you put the people in our Personal Trust Group to work for you. Professionals like Dick Stegemeier and Walter Gross. They believe in a partnership approach to money management. First, they work with you to determine your needs and goals. Then, they present an individualized program designed to increase the return on your investments and to minimize market volatility. And they maintain a follow-up dialogue with you to keep your program consistent with your needs and goals and with changing market conditions.

Dick and Walter back up their recommendations with the same expertise that has won our Asset Management Group nationwide recognition for consistent asset management performance.

All your life you've worked to build your net worth. Let professionals help make the most of it. Put Dick Stegemeier or Walter Gross to work for you. Give Dick a call at 639-8191. Or call Walter at 639-8190.

Personal asset management. It's another way we're proving we want to be your bank.



Dick Stegemeier



Walter Gross

Personal Trust Group

AMERICAN FLETCHER NATIONAL BANK AFNB

EDITORIALS

Kennedy's New Health Proposal: More Slogan Than Reality

CONTINUED FROM PAGE 548

Security bill, it appears private health insurers would be allowed a role of subordination. Government would regulate them and preside over negotiations on their premiums and on physician and hospital payments, and no company would be "at risk" in the true insurance sense.

In the spirit of the old bill, there would be a built-in stress and strain between health care promises and economic prohibitions.

On the one hand, the measure would guarantee comprehensive health insurance coverage to every American at all times, amplify Medicare coverage (with no deductibles or co-insurance), reform Medicaid (eliminating the means test), and so forth.

On the other hand, the program would be subject to a national budget, whereby health expenditures would be strictly limited by state and regional allocations. Providers would have to furnish all services within the limit.

If funds run out before the end of a budget period, would providers be expected to subsidize health services? Would budget restraints and negotiation of insurance premiums and provider payments invite government rationing of care?

Those are among the grim but realistic questions to be raised as Mr. Kennedy and his supporters try to supply all the answers.

Certainly we all want answers—sound answers—to present gaps and shortcomings in health protection. In the words of AMA Executive Vice President James H. Sammons, M.D., "The AMA continues to believe that consumer choice, private insurance, and limited government regulation should be at the heart of our health care system.

"Medicine again faces a renewed responsibility to speak out on the major legislative proposals dealing with health care and to share our concerns with the Congress and our fellow citizens."—*AMA Editorial*

Improving Survival Odds

Prostaglandin E_1 has been demonstrated to improve the preoperative condition of blue babies. Eleven of 12 critically ill newborns with various congenital heart malformations showed significantly higher levels of oxygen after receiving PGE_1. The latter keeps the ductus arteriosus open and allows time for the infant to grow stronger before surgical correction is accomplished.

Green Thumb, Inc.

Green Thumb, Inc. is a community parttime employment service sponsored by the National Farmers Union and funded by the U.S. Department of Labor and 7,000 other agencies and organizations. It hires low-income senior citizens in rural areas.

In Indiana, Green Thumb has hired patients in Richmond, Evansville, Madison and Logansport State Hospitals to work both inside and outside the institutions. Some of the patients, because of the occupational therapy, have been returned to homelife. This beneficial effect has been observed in patients who have been institutionalized as long as 20 years. Currently, 40 patients from the Indiana hospitals are working.

Universal 'Flu' Vaccine?

Searle researchers, by using genetic engineering methods, have transferred the genes coding for the hemagglutinins of an influenza virus into a bacterium. Hemagglutinins are the viral antigens that are the active component in influenza vaccines. The new bacterial strains can be made to synthesize the viral antigens and may make it possible to manufacture a more universal vaccine against influenza. If this proves possible a new vaccine will not be necessary every time the virus mutates.

Prostacyclin Prevents Clogging

Prostaglandin research has established that the normal interior of blood vessels secrets a substance called prostacyclin (PGI_2), which prevents adherence of platelets. This may be the reason platelets adhere to cholesterol patches. A British researcher plans to determine whether this prostaglandin or an artificial substitute may be effective in preventing clotting on the tubes and filters in heart-lung machines and in dialysis machines.

The Great Laxative Escape



COLACE®

dioctyl sodium sulfosuccinate

Colace means escape—from laxative stimulation, from laxative harshness, from laxative habit. Colace gently helps soften stools for easy, painless, unstrained elimination. It's the great laxative escape, from infancy to old age. Available in 100 and 50 mg. capsules. Syrup or liquid.

Mead Johnson

PHARMACEUTICAL DIVISION

©1978 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. 1578-1

This asthmatic isn't worried about his next breath...

he's active
he's effectively maintained on

QUIBRON®

Each capsule or tablespoonful (15 ml) liquid contains theophylline (anhydrous) 150 mg and glyceryl guaiacolate (guaifenesin) 90 mg



- theophylline for effective around-the-clock bronchodilator therapy
- 100% free theophylline

Indications: For the symptomatic relief of bronchospastic conditions such as bronchial asthma, chronic bronchitis, and pulmonary emphysema

Warnings: Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

Precautions: Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitrosonaphthol reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

Adverse Reactions: Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

How Supplied: Capsules in bottles of 100 and 1000 and unit-dose packs of 100. Liquid in bottles of 1 pint and 1 gallon.

See package insert for complete prescribing information.

Mead Johnson PHARMACEUTICAL DIVISION

© 1979 Mead Johnson & Company • Evansville, Indiana 47721 U.S.A. MJL 8-4294

Guest Editorial

A More Merciful Capital Punishment Is Needed

RICHARD J. NOVEROSKE, M.D.
Evansville

I once heard a fine psychiatrist say, "The death penalty should be kept and used, for there are people who are essentially mad dogs, and it's an act of mercy for them as well as society to execute them."

In June 1972, the United States Supreme Court held the death penalty to be unconstitutional in that it is a "form of cruel and unusual punishment." But the court left a loophole by saying that it may be constitutional for a death penalty to be exacted for certain crimes as stipulated by legislatures. This loophole can be widened or closed as time passes and our attitudes and laws evolve.

When this Supreme Court decision was announced, the death penalty for about 500 prisoners in the United States was voided. Some of us heard the taped celebration on death row in the Georgia State Prison, when the prisoners there learned that there was no chance of their being executed.

I think it is a mistake to remove the death penalty. By doing so, society has tied one of its hands behind its back. There are men who are beyond rehabilitation; locking them up in a crowded prison gets them out of the social stream for a while. But they often return to do more harm, and it's expensive in many ways to preserve them.

It's difficult to believe that the death penalty isn't a deterrent; the old line from the movies, "You'll get the chair for that!" seems just as full of feeling when the prisoners in Georgia's death row celebrate being spared from execution.

All of us fear death to some degree. As Hamlet said near the end of his famous soliloquy:

> But that the dread of something after death,
> The undiscovered country from whose bourn
> No traveler returns, puzzles the will,
> And makes us rather bear those ills we have
> Thank fly to others that we know not of.
> Thus conscience does make cowards of us all.

The men in our prisons are a mixture; some are severe neurotics who commit crimes in order to be punished—the forger is classically this kind of person. There are the illiterates and unskilled who can't earn their bread and need to be taught and trained. Jean Valjean, the hero of Les Miserables, is a classic figure in literature—the man who stole a loaf of bread to feed his sister's starving children and was convicted and made a felon in the France of about 150 years ago.

There are the criminally insane who should be kept in maximum security hospitals.

And then there are the psychopaths—the men who think and feel, "I'm O.K.: Everybody else is not O.K."—in the words of the psychiatrist, Thomas Harris. This latter group, the one we usually think of when we speak of criminals, is usually incorrigible and frustrating to deal with—inside of or out of prisons.

I think the death penalty should be kept and used for some members of this group of criminals.

It may help society and the Supreme Court to accept the death penalty if it were done with the same consideration that we give a mad dog or other animal that has to be put to sleep. For some time now we have been using overdoses of tranquilizers, barbiturates, or other drugs to mercifully end the life of an animal. Why don't we show the same kindness to our criminals?

We don't; usually we execute by electrocution, hanging, firing squads, gas chambers or guillotines.

But why shock a "mad dog"? There is a vengeful attitude in the manner that society has used to execute its criminals. And it does society no good—it creates guilt and provides ammunition for the "bleeding hearts"—to execute in these dramatic, old-fashioned ways when gentler means are at hand.

Why can't we execute our criminals with an overdose of morphine, for example? Give them "the sleep of the gods" as a means of exiting this life and hopefully going on to something better. It would require no special equipment and no dramatic "walk down a last mile" to an isolated chamber or chair. A technician in the already sedated prisoner's cell and a 20cc vial of morphine sulfate, a syringe, and a needle for intravenous injection would do the job. It would be a pleasant final trip.

If society is serious about using the death penalty for some of its criminals, it should be done more gently than it has been done in the past. The means are at hand; why not use them? Why be vengeful? Why not be merciful? There would be less criticism of a merciful society that executed its criminals with the same kindness it gives to its mad dogs and other animals. And the juries, judges, and legislators who decided for death penalties wouldn't be burdened with unnecessary guilt.



AUXILIARY REPORT

Charlotte (Mrs. Abner P.) Bennett
President, ISMA Auxiliary

Have you immunized your child against one of the greatest killers today—highway accidents?

This provocative question was asked of 35 participants in the Child Restraint Workshop held in Chicago June 7-8. It was sponsored by the National Highway Traffic Safety Association.

In this "Year of the Child," when health and protection of children is being emphasized, an in-depth look at child protection in motor vehicles is in order.

Immunization against the highway epidemic is just as important as immunization against childhood diseases. But this is an area where the "shot" doesn't have to be administered by trained medical personnel. We can buckle up that child in an approved child restraint system. We can help save that child from possible injury or death.

Dr. Robert Sanders, a pediatrician and county health officer in Tennessee, has been a leading advocate for use of child restraints in motor vehicles. He has figuratively moved those "Tennessee mountains" to get the nation's first state law enacted requiring the use in cars of child restraint seats for children under the age of 4. Although the bill is not what he wanted, because of a babes-in-arms amendment inserted by an opponent in hopes of getting it defeated, the law is on the books—and it is being implemented.

When you realize the hazards a child faces when riding in an automobile without a restraint of some sort, the cry of "further encroachment on individual liberties and Big Brotherism" loses some of its appeal. As adults, we have the right to take risks. But do we have the right to impose our point of view on small children who have no say in deciding if they will take the greatest risk of their short lives? Auto accidents are the main cause of death among children over one month old. Parents, surprisingly, buckle up their babies and children even less than they buckle up themselves.

An unrestrained infant weighing 10 pounds becomes a 300-pound projectile in a 30 mph crash! His head—large and fragile, the bones still cartilage—is the first part that goes into a barrier. Again, in a 30 mph crash, an unrestrained 100-pound mother, holding this infant, becomes a 3,000-pound force—more than enough to crush the child against an instrument panel.

If scare tactics and injury-death statistics turn you off, then consider some appealing aspects of using child restraint systems. What would you say to having a better behaved child in your car?

Edward R. Christopherson, Ph.D., associate professor of pediatrics at the University of Kansas Medical Center, has researched the behavior of children in automobiles with and without restraints. He provided a car seat and instruction on how to introduce the seat to the child—with dramatic results.

The behavior of the child improved tremendously. In most cases, in fact, children were found to behave better, enjoy the trip more. and be safer in the event of an accident. Insurance companies, too, are becoming increasingly interested in child restraints. Injuries may affect the livelihood of a child for life, making much higher monetary settlements mandatory. One insurance company in Michigan is providing free infant and toddler safety restraints for their insured families with small children.

The American Academy of Pediatrics has introduced a resolution to the AMA House of Delegates endorsing child restraints in automobiles.

After two days of participating in this highly interactive workshop—with Dr. Robert E. Hannemann of Lafayette, chairman of the Indiana Chapter, American Academy of Pediatrics—I am anxious to present the technical distributional and legislative information on child restraint to the medical auxiliary community of Indiana.

We must make the International Year of the Child, 1979, a traffic safety year of the child.

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
62B East Wayne
Ft. Wayne, Indiana 468O2
(219) 422-9B21

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 4725O
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
BO9 Merchants Bank Building
Terre Haute, Indiana 478O8
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
1128 - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
22O South Walnut Street
Bloomington, Indiana 47441
(812) 334-391B

Kenneth L. Hoon
Beltone Hearing Aid Service
2O39 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 472O1
(B12) 372-1BB6

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 4715O
(B12) 945-O235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2BO1 Lincoln Avenue
Evansville, Indiana 47714
(B12) 479-1437

Beltone of Vincennes
Security Bank Building
2O North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 8B2-4715

L. B. O'Connell
Beltone Hearing Aid Service
19O6 East Main Street
Lafayette, Indiana 479O1
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
14O3 Brown Street
Anderson, Indiana 46O16
(317) 643-33B9

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-297O

Beltone of Muncie
14O4 Granville Square
Muncie, Indiana 47362
(317) 288-B737

Beltone of Kokomo
4O4½ Arnold Court
Kokomo, Indiana 469O1
(317) 453-1944

Beltone of Logansport
3O8 East Broadway
Logansport, Indiana 46947
(219) 753-351O

Beltone of Peru
51 South Broadway
Peru, Indiana 4697O
(219) 472-141O

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 4632O
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 464O9
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 466O1
(219) 2B7-7221

Beltone Hearing Aid Service
4O1 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 462O4
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
19O6 East Main Street
Lafayette, Indiana 479O1
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company

FUTURE FILE

Columbus, Ind. Seminar Set

The Central States Occupational Medical Association will sponsor a fall seminar Sept. 7-8 at the Holiday Inn, Columbus, Ind.

Governor Otis R. Bowen, M.D., will be the luncheon speaker Friday, Sept. 7.

The program will cover screening tests for lung cancer, the status of computers in the interpretation of treadmill exercise tests, coronary bypass surgery, and occupational toxicology. It is approved for eight AMA Category 1 credits and 8 1/4 hours of AAFP credit.

For information, contact Rita Packer, Central States OMA, 119 Shabbona Drive, Park Forest, Illinois 60466. Tel: (312) 782-2166.

Cancer Seminar in Wisconsin

A Midwest Cancer Seminar will be held Sept. 20-22 in Madison, Wis. at the Concourse. It is being sponsored by the Wisconsin Clinical Cancer Center and the Medical College of Wisconsin.

The seminar is accredited for 12 hours in Category 1 of the AMA's Physician Recognition Award.

For information, contact the Wisconsin Clinical Cancer Center, 1900 University Ave., Madison 53705.

Calendar of Events

Aug. 5—Commission on Public Relations
Aug. 15—Ad Hoc Committee on Immunization
Aug. 19—Commission on Medical Education
Aug. 19—Subcommission on Accreditation
Sept. 3—Labor Day
Sept. 9—Commission on Medical Services
Sept. 9—Board of Trustees
Sept. 12—13th District, Michigan City
Sept. 19—11th District, Kokomo
Sept. 20—12th District, Fort Wayne

Perlstein Lectureship

The 1979 John I. Perlstein Lecturer will be Norman Kretchmer, M.D., director of the National Institute of Child Health and Human Development. The lecture will be held Monday, Sept. 10, in the Health Sciences Center Auditorium, University of Louisville School of Medicine.

For information, write Billy F. Andrews, M.D., Professor and Chairman, Department of Pediatrics, University of Louisville School of Medicine, Louisville 40202.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

Since 1899

THE

MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Maeller, Representative
Suite 624, 6100 North Keystone Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indianapolis 46220
Northern Indiana Office: Douglas O. Sellan, Representative
120 LaSalle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332

FUTURE FILE

Care of Seriously Ill Child

A symposium on "Care of the Seriously Ill Child" will be conducted Oct. 11-12 at the Hyatt Regency Hotel in Indianapolis. The symposium is sponsored by the Departments of Pediatric Surgery and Pediatrics, Indiana University School of Medicine. It is approved for 13 hours of postgraduate medical education.

For information, contact Jay L. Grosfeld, M.D., Symposium Director, Riley Children's Hospital, 1100 W. Michigan St., Indianapolis 46223.

Family Practice Review

The Sixth Annual Family Practice Review will be conducted by Wayne State University School of Medicine Sept. 17-21 at Scott Hall, Detroit, Mich. The course offers 40 hours of AMA Category 1 credit.

For information, write Division of Continuing Medical Education, 1206 Scott Hall, Detroit 48202. Tel: (313) 577-1180.

University of Kentucky Courses

The College of Medicine, University of Kentucky, has announced the following courses:

"Fiberoptic Bronchoscopy: A Workshop," Sept. 7-8;

"The Radiology of Multisystem Diseases," Oct. 11-13;

"A Clinical Focus on Tuberculosis and the Mycoses," Oct. 17-19;

"Symposium on Neurological Disorders of Children," Oct. 21-24;

"Burn Symposium," Dec. 7-8.

All courses will be conducted at the Hyatt Regency Hotel in Lexington.

For information, contact Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington 40536.

Nephrology Symposium

"Clinical Nephrology 1979" is the title of a one-day symposium to be conducted Friday, Sept. 28, at the Airport Hilton Hotel in Indianapolis. Sponsored by the Kidney Foundation of Indiana and the I.U. School of Medicine, it will cover the clinical, diagnostic and treatment aspects of hypertension, hematuria, the child with urinary tract infections, and kidney stones.

For further information, write the Kidney Foundation of Indiana, 1010 E. 86th St., Indianapolis 46240, or the Division of Continuing Medical Education, I.U. School of Medicine, 1100 W. Michigan St., Indianapolis 46223.

Neonatal Pediatric Workshop

The Indiana Academy of Family Physicians will conduct a Neonatal Pediatric Workshop Aug. 17-19 at the Brown County Inn, Nashville, Ind.

For information and reservations, contact Jackie Schilling, IAFP, 4847 S. High School Road, Indianapolis 46241. Tel: (317) 856-3757.

Annual Richter Lectureship

The Annual Richter Lectureship will be held at St. Vincent Hospital and Health Care Center, Indianapolis, Wednesday, Oct. 10. Dr. William C. Roberts, of the National Heart, Lung and Blood Institute, will be the guest speaker.

This will be an all day seminar, with a tent luncheon on the hospital grounds. There is no fee for the scientific portion of the meeting. An information brochure is being sent to all physicians in the state.

Diagnostic Technique Seminar

A seminar for Korean-American physicians in practice will be conducted Sept. 15 at the Mount Sinai Hospital Medical Center, Chicago. The subject will be "Recent Advances in Diagnostic Techniques for Medical Practice." Registration deadline is Sept. 1. Registration fee is $20.

For details write Office of Medical Education, 15th St. and California Ave., Chicago 60608.

Toxins in Human Food

"Toxins in Human Food" is the subject of a national conference scheduled for Sept. 23 - 26 in Detroit at the Radisson-Cadillac Hotel. Detailed program information and registration is available from University of Michigan Extension Service, 412 Maynard St., Ann Arbor,

AMA Combined Seminar

The AMA will conduct a combined seminar at Portsmouth, N.H. Aug. 27-Sept. 1. Two programs will be combined into "Medical Staff Leadership/Dynamics of Conflict Resolution." The registration fee for AMA members is $450, for non-members $550, and for others $600. The sessions will be at Wentworth-by-the-Sea.

Write or call the AMA Department of Negotiations, 535 N. Dearborn, Chicago 60610. Tel: (312) 751-6634.

The Maker

Examining a Few Myths About Prescribing.



Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.

FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were not bioequivalent to a reference product. As yo know, there is substanti literature on this subject affecting many drugs, in cluding such antibiotics as tetracycline and erythromycin. The record o drug recalls and court actions affirms strongly that there are difference among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.

MYTH: Industry favors only "expensive" brand names and denigrates all generics.

FACT: PMA companies make 90 to 95 percent o the drug supply, including, therefore, most of th generics. Drug nomenclature is not the important point; it's the compe tence of the manufacturer and the integrity o the product that count.

Matters.

MYTH: Generic options almost always exist.

FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.

FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

MYTH: Drugs account for a major portion of the rise in health care costs.

FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

MYTH: Government intrusions into the marketplace will save tax money.

FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal "help," such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

PMA

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

CANCER CORNER

**EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER**

Three free booklets for health professionals and the public are being distributed:

- *Asbestos Exposure: What it Means, What to Do.*
- *Asbestos Exposure: A Desk Reference for Communicators.*
- *Clearing the Air: A Guide to Quitting Smoking.*

To order, contact:
Office of Cancer
Communications
National Cancer Institute
Building 31, Room 10A18
9000 Rockville Pike
Bethesda, Md. 20014
Phone: 301-496-5583

* * *

The side effects of various treatments can disrupt the normal eating habits of the cancer patient.

A Guide to Good Nutrition During and After Chemotherapy and Radiation is a handbook written to help with such dietary problems. It includes recipes to increase the calorie and protein contents of meals and gives suggestions for making food look and taste better. Copies are available for $2 each from:

Adult Leukemia Center
Fred Hutchinson Cancer
Research Center
1124 Columbia St.
Seattle, Wash. 98104

* * *

A book written to inform workers and plant managers about cancer risks in the workplace is available from the New York Academy of Sciences.

The 77-page paperback, *Cancer and the Worker,* is a result of the Academy's March 1975 symposium on occupational carcinogenesis. The symposium was sponsored by the Academy, Group Health Incorporated, NCI, NIOSH and the Society for Occupational and Environmental Health. NIOSH provided financial support for the book.

* * *

Responding to growing nationwide interest in health problems related to smoking and asbestos, the Cancer Information Clearinghouse has cataloged hundreds of print and audio-visual materials into two bibliographies on these subjects.

The smoking bibliography—with more than 300 citations of United States and Canadian produced materials and programs—covers such topics as education, risk and prevention, cessation, non-smokers' rights and legislation. Spanish and French language materials also are listed.

Public and professional educational materials from government agencies, industry, labor and educational and professional organizations are cited in the asbestos bibliography. Topics range from safety monitoring of asbestos dust to worker education.

All entries are annotated and include information on costs and ordering.

To obtain free copies of *Smoking and Health* and *Asbestos and Health,* write to:

The Cancer Information
Clearinghouse
National Cancer Institute
7910 Woodmont Ave.
Bethesda, Md. 20014

* * *

The National Cancer Program (NCP) Speakers Bureau can arrange for guest lectures to address audiences in your area interested in cancer-related topics.

Speakers include scientists and doctors involved in cancer research and treatment, nurses, health educators, rehabilitation specialists, administrators and cancer patients and their families.

The speakers are associated with cancer institutions and organizations nationwide and will be matched to the needs and size of your audience. A wide range of topics can be covered, including carcinogenesis, cancer-related legislation, grant programs, rehabilitation, diet and nutrition, immunology and environmental causes of cancer.

To arrange a speaker for your group or to offer your services as a speaker, contact:

Carolann Hooten
NCP Speakers Bureau
National Cancer Institute
Building 31, Room 10A20
Bethesda, Md. 20014
Phone: 301-496-6756

* * *

The Office on Smoking and Health (OSH) has been created by DHEW Secretary Joseph A. Califano Jr. to administer the national smoking program.

According to the Secretary, the office will be responsible to: collect and disseminate information about the dangers of smoking; promote and stimulate behavioral and biological research on the causes and effects of smoking by government and voluntary agencies; coordinate the Public Health Service's research and educational programs; and develop standards, criteria and methodology for improving information programs related to smoking and health.

The National Clearinghouse on Smoking and Health is now part of OSH and has been moved from Atlanta to Rockville, Md. For information about OSH, contact:

John M. Pinney, Director
Office on Smoking and Health
5600 Fishers Lane
Park Building, Room 1-58
Rockville, Md. 20857
Phone: 301-443-1575



Tagamet®

brand of

cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

When painful spasm is the presenting symptom...



...in the functional bowel/irritable bowel syndrome*

Bentyl®

(dicyclomine hydrochloride USP)

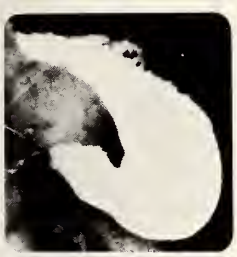
10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

8-4420 (Y736A) MNR-804

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INOICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FOA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL OISOROERS ARE OFTEN RELIEVEO BY VARYING COMBINATIONS OF SEOATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINOICATIONS. Obstructive uropathy (lor example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. AOVERSE REACTIONS. Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia, increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. OOSAGE ANO AOMINISTRATION. Oosage must be adjusted to individual patient's needs.

Usual Dosage. Bentyl 10 mg capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults* 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVEROOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine™ (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Oecatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Oivision of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc
Cincinnati, Ohio 45215, U.S.A.

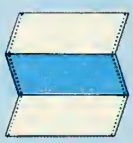
Fine Tailors

Medical Data Systems® are tailored to the individual needs of groups, clinics and labs. Begin with the basic service bureau concept and phase-in your own in-house operation. In the interim, S-Tek takes full responsibility for installation, education and training and procedures.

S-Tek Computers Services —
The Data Processing Tailors

MEDICAL DATA SYSTEMS®

Call or Write Ken Williams,
Vice President of Marketing



S-Tek
COMPUTER SERVICES, INC.
P.O. BOX 328 TERRE HAUTE, IN 47808 812-232-1385

Medical Data Systems,® a registered trademark of S-Tek Computer Services Inc.

There's A Word For It

Loss Of Tone

RICHARD J. NOVEROSKE, M.D.
Evansville

We often see distended abdomens post-operatively and in other situations and make the diagnosis of *adynamic ileus*. But I don't think that is a good term; it's contradictory. *Adynamic* means "without force," but *ileus* comes from the Greek *ileo* and means "I roll up tight." So we're saying that the patient has an intestine that is "rolled up tight, without force" and that's difficult to believe.

I think it is better to say that the intestine has lost tone; whether it is due to operative handling, peritonitis, vascular obstruction, a vertebral fracture, or superimposed upon long-standing intestinal obstruction, the common factor that is present in the dilated intestine with little or no peristalsis, is a loss of tone. And that's what I report, when I see it on x-ray films of the abdomen, and the clinicians understand this term clearly.

No muddying of the waters with three- and four-syllabled Latin words that are inherently contradictory is really necessary. But medical custom has grafted these awkward terms on most of us, and I wonder if we'll ever be able to shake off habits like *paralytic ileus* or *adynamic ileus*. There's always a fleeting instant of confusion when these terms are used, for most physicians know that *ileus* alone can also mean intestinal obstruction, and we have to do a little mental gymnastic or extra thinking to get to the concept that the intestine isn't obstructed, but is dilated because of loss of tone. Why not say in simple English, "The intestine has lost tone."

FOX HUNTING SEASON NOW OPEN!

You have to be smart to capture a Fox, the sporty 5-passenger sedan from Audi. With features like front wheel drive, rack-and-pinion steering and 0 to 50 in 8.1 seconds, it also helps to be quick. Giganti only gets a limited number. So buy now, before the Fox hunting season is over.



GIGANTI VOLKSWAGEN PORSCHE AUDI
INC.
6901 East 38th Street
Indianapolis, Indiana
545-4211

1978 Service Honor
we care
AWARD WINNER

Nutrition and Obesity

MIRIAM H. THOMAS
Natick, Massachusetts



MANY HEALTH PROBLEMS are related to diet, and obesity is no exception. Obesity is a major nutritional problem in spite of the fact that half of the inhabitants in the world may be malnourished or underfed. It is a problem of all ages and in both sexes which occurs when the intake of food energy exceeds energy expenditure resulting in an excessive accumulation of adipose tissue in the body. There are many aspects of obesity which are not clearly understood and it should not be used interchangeably with the word "overweight." Overweight is defined as excessive heaviness, which may or may not include an excessive amount of body fat.

Before the turn of the century, standard height-weight tables based on average weights of men and women who were accepted for life insurance were used in this country to judge overweight. As many inadequacies and imprecisions were recognized in these tables, other means with scientific basis were developed. Body composition was analyzed in terms of relative fatness. One such procedure was developed to measure the specific gravity of a person by weighing in air as usual and then in water by suspending the person below the surface of the water.

A specific gravity value of 1.060 or less is an indication of excessive fat. Another method for estimating body fat is that of measuring with calipers the thickness of the skin at several points of the body surface. The most realistic but gross evaluation of obesity is an examination of the nude body in a mirror for excessive fat deposits or employing the "pinch test" to the back of the upper arm and side of the lower chest.

The author is a research chemist with the Food Sciences Laboratory, U.S. Army Natick Research and Development Command, Natick, Mass. 01760.

Acknowledgement: Illustrations were prepared exclusively for THE JOURNAL by Mike Downes, Audio-Visual Office, U.S. Army Natick Research and Development Command. The effort was coordinated by Art Reardon, Public Affairs Office of the same organization.

Although the relationships between cause and effect have not been clearly defined, obesity has been associated with high blood pressure, coronary artery disease, arthritis, kidney disorders, gallstones, diabetes, and decreased life expectancy. It has been found that the amount of body fat can be increased by an increase in the number of fat cells and by an increase in the amount of fat in each individual fat cell. The number of fat cells increases from birth to early adulthood and remains constant from then on. Now, childhood obesity is receiving attention because researchers have shown that weight gain during early infancy has been associated with obesity in later childhood and adulthood. Investigators have established that when obese people lose weight, the number of cells does not decrease, in spite of the fact that the amount of fat in each cell is decreased. Likewise, when lean adults gain or lose weight, the total number of fat cells does not change. Scientists believe that both genetic and nutritional factors play a part in determining the number of fat cells that an individual has.

In addition to heredity, number of fat cells, and body chemistry, energy expenditure plays a part in obesity. Obese people sometimes feel that exercise cannot help them to lose weight, but it can. Besides the physical factors involved in the development of obesity, there are the psychological aspects of obesity. Eating involves more than just satisfying nutritional needs. Food takes on emotional significance even beginning with infancy. Psychological eating disturbances include not only overeating but anorexia nervosa, or extreme thinness due to refusal of food which occurs mainly in young women. They attempt to prove their ability to be independent and effective people by severely controlling their weight. Psychological problems of obesity are complicated, but it is clear that obese individuals eat in response to a variety of stimuli which may or may not have anything to do with being hungry.

Obesity can be managed by psychological, physical, pharmaceutical and/or dietary regulation. All appear to afford only initial temporary help and merely postpone the "day of reckoning." Studies show that nibbling all day long or eating five small meals throughout the day is far better than omitting or skimping on some meals and trying to make up for it in one or two big meals. So long as food retains its natural character, it possesses a built-in guarantee against overeating. As an example, you





can't eat enough raw apples to make you fat. But you can eat that much sugar in candy without even knowing when to stop eating, and sugar makes you fat! Apples won't! As long as Western human beings eat concentrated carbohydrates, there will be widespread obesity in the Western world.

There are many good reasons for avoiding obesity but too many seek the one magic or exotic diet plan that will produce rapid and permanent disappearance of fat. Some diets are sensible, others are devoid of scientific basis and still others are dangerous. Some of the more popular diets have been based on low intake of carbohydrate and high protein and fat intake. This type of diet soon becomes very monotonous and often results in ketosis, a condition in which the body produces increased amounts of ketone bodies which can be harmful. This diet also contains large amounts of cholesterol and fat which could lead to weakness, fatigue, fainting tendencies, dehydration, calcium depletion, and kidney trouble.

Most dieters are unsuccessful in their efforts to keep excess weight off for over two years. Some researchers have concluded that complete fasting may be less stressful than eating a low calorie diet. A short fast, 10-14 days, in the hospital under medical supervision can produce a weight loss of 15 to 20 pounds without physical and psychological distress. However, most of this weight loss is fluid.

The best way to lose weight and keep it off is careful examination of your eating habits and alteration of the patterns that cause gain in weight. Those people who learned from childhood to eat sensibly have fewer problems with weight control than those who were plied with food from infancy. "With obesity, prevention is more effective than attempts at cure."

SUGGESTED READING

Present Knowledge in Nutrition, 4th Edition, The Nutrition Foundation, Inc., 1976.

Foundations of Nutrition, 5th Edition, The Macmillan Company, 1956.

Overweight, Causes, Cost and Control. Jean Mayer. Prentice-Hall, Inc., 1968.

Current Concepts of Obesity, *Dairy Council Digest* 46:4, 1975.

What's New in Weight Control? *Dairy Council Digest* 49:2, 1978.

V-Cillin K®

penicillin V potassium

is the most widely prescribed brand of oral penicillin



Tablets
125, 250, and 500 mg*
Oral Solution
125 and 250 mg*/5 ml

V-Cillin K®
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. [102175]

***Equivalent to penicillin V.**

Additional information available to the profession on request.

Lilly

Eli Lilly and Company
Indianapolis, Indiana 46206

900416

CASE HISTORY

Dangers of Self-Prescription

GERALD P. JOHNSTON, M.D.
Indianapolis

A 30-YEAR-OLD WHITE single male physician was found dead in his room surrounded by empty pill and vodka bottles. Although his obituary stated that he died of a cardiac arrest, he died of the ultimate self-prescription: a lethal overdose of alcohol, Seconal and Talwin.

The victim began his pattern of self-prescription in medical school when he started taking amphetamines to stay awake to study for exams. He had graduated in the top of his high school and pre-medical class, and had always been an over-achiever in school. He studied long hours and began using amphetamines to stay awake. By his third year of medical school he was having frequent headaches and difficulty sleeping. He began using Darvon and sleeping pills obtained from a young physician friend. He was given Talwin on several occasions for severe migraine-like headaches. He also began drinking heavily and taking Valium to relax on weekends.

During internship he felt increased pressure and tension, and he began using Valium, sleeping pills and Talwin more frequently for severe headaches. He was often depressed and dependent on medication, but was still functional and considered one of the top interns in his group. He went on to an Internal Medicine Residency in the university hospital system and had difficulty coping with the increased responsibility and dealing with patients' relatives and with death. He became more depressed and increased his Talwin use to the point that he was functioning poorly. He was warned on several occasions about his apparent intoxicated state. He also had been drinking heavily at night, but denied drinking prior to going on duty. He, however, was using Talwin by that time throughout the day.

He became more depressed, was having suicidal thoughts and was hospitalized for treatment of depression. He resumed his pattern of drug use and heavy drinking after returning from his hospitalization and was dropped from his residency. He was able to get into a residency program in a VA hospital, but continued his pattern of heavy drinking, drug abuse and increasing depression. He was also dropped from that residency program and was hospitalized on four occasions for treatment of depression.

Little attention was given during his hospitalizations to his drug and alcohol abuse. He was unable to find a position in a medical setting, became more depressed, discouraged, and made a suicide attempt. He was hospitalized again in a psychiatric hospital and resumed his alcohol and drug abuse shortly after release. He was briefly hospitalized in an alcoholism treatment center where he was noted to be extremely depressed as well as dependent on alcohol and Talwin. Arrangements were made for him to go to a major medical center for treatment in the chemical dependency unit.

After two months hospitalization, he was able to obtain a position working as a staff physician in a state hospital. He found that setting extremely depressing, but stopped taking anti-depressant medication. He did not follow through with aftercare treatment and apparently again resumed his alcohol and drug

The author is chairman, Impaired Physician Peer Review Committee, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis 46208.

abuse. He was found in his room on the hospital grounds, apparently the victim of an overdose of alcohol, Seconal and Talwin.

The preceding case history is just one example of the danger of self-prescription of psychoactive and analgesic drugs.

As awareness of drug addiction in the general population has increased, public and professional concern over addiction as an occupational hazard among physicians also has developed. According to Green,[9] it has been estimated that as many as 1 in 100 physicians are addicted to drugs as compared to 1 in 3,000 in the general population. Other estimates, by Garb[8] and Korcok,[11] indicate drug dependence in physicians as between 10 and 30 times that of the general population. This high rate of drug dependency appears to be related to physicians working under a high level of stress, the accessibility to narcotics and other controlled drugs, and a tendency toward self-prescription and self-treatment. It also appears that certain physicians have a predisposing personality that makes them more susceptible to becoming dependent on alcohol, narcotics and other sedative drugs. Recurrent depression is a common factor in physicians who become dependent on such drugs.

According to Dr. Ray Casterline, former president of the Federation of State Medical Boards, more than 700 physicians are lost each year because of alcoholism, drug addiction and suicides. He estimated there are more than 100 physician suicides a year, another 200 physicians are lost because of drug dependence and about 400 because of alcoholism. He said that physicians who commit suicide often have been dependent on alcohol or other drugs.

Garb[8] states that nearly 300 physicians become addicted to meperidine each year and that many of these are lost to the medical profession because of their addiction. Although Talwin was initially considered to be a safer drug as far as addiction is concerned, more and more physicians are being seen who have become dependent on Talwin. I personally am aware of at least four physicians who had become dependent on Talwin and ended up as suicides within the last few years.

Although many reasons for the high rate of drug dependence in physicians have been given, the most obvious factor involved in drug dependence is self-prescription. A few physicians become addicted to opiate medications that have been prescribed because of severe pain related to major medical illnesses. However, most who do become dependent on such drugs initiate and continue this pattern through self-prescription. Such patterns may be started in a seemingly harmless fashion with occasionally taking stimulants, sedatives, minor tranquilizers or pain medication in periods of stress. As a physician finds that these medications seem to relieve uncomfortable feelings, he may gradually increase the frequency and amount of the drug until he reaches the point of being dependent on such medication. His tolerance and dependence on the medication may develop slowly. If a physician becomes dependent on such medications, he may resort to unethical or illegal means to continue obtaining his medication. This not only leads to known health problems, but also to difficulties within the physician's family and his practice. Physicians who themselves are dependent on drugs tend to over-prescribe psychoactive and analgesic medication for their patients. Such physicians eventually come to the attention of medical licensing boards, either because of their excessive self-prescription or excessive prescription for patients.

Generally, physicians have a good prognosis for recovery from alcohol and drug dependence if they are forced into effective treatment. In a study of 46 physician addicts in Virginia, by Green,[9] the Virginia disciplinary and therapeutic plan for addicted physicians was effective in successfully rehabilitating and returning to medical practice 72% of the physicians. Similar experiences have been reported in other states where there are physician effectiveness or impaired physician programs.

Several physicians with drug dependence have come to the attention of the ISMA Impaired Physician Committee. Most of these have been successfully referred for treatment and rehabilitation. A few cases of excessive prescription to family or patients also have come to the attention of the committee. In addition to self-prescription, prescription of psychoactive, sedative and narcotic medications to the physician's family or employees also can become a serious problem. Casual

prescription of such medications to one's family, associates, or employees without proper evaluation or consultation can lead to dependence and other problems. Often the dangers of dependence on sedatives such as Doriden and Placidyl or minor tranquilizers such as Valium and Librium are overlooked by physicians, particularly when they prescribe them for themselves or those close to them.

The Impaired Physician Peer Review Committee is concerned about the high risk to physicians and their families of substance abuse. In view of this, the committee is recommending that the Indiana State Medical Association take a position that it be considered unethical to prescribe narcotics, sedatives, minor tranquilizers, stimulants and narcotic derivates for oneself or one's family except for brief treatment of acute situations until consultation can be obtained. It also is being proposed that pharmaceutical companies do not provide samples of the above types of drugs to physicians. The committee feels that physicians who have become dependent on such drugs should seek treatment and rehabilitation as soon as possible. In addition, more attention and education concerning the dangers of self-prescription and drug dependence should be given both in medical school and in post-graduate education. This is an area of prevention which could, if effectively done, avoid loss of many valuable physicians to the medical profession, and to their patients and families.

REFERENCES

1. AMA Council of Mental Health: The sick physician (Impairment by psychiatric disorders, including alcoholism and drug dependence). *JAMA*, 235:6, 684-687, Feb. 5, 1973.
2. AMA Dept. of Mental Health: Helping the impaired physician. *Report of conference*, February 1977.
3. AMA Dept. of Mental Health: The impaired physician. *Report of conference*, April 1975.
4. Berman JS, Sargant J: Organized medicine and the drug abusing physician. *Md State Med J*, pp 37-42, October 1976.
5. Bissell L, Jones RW: The alcoholic physician: A survey. *Am J Psychiatry*, 133:10, 1142-1146, October 1976.
6. Bittker TE: Reaching out to the depressed physician. *JAMA*, 236:15, 1713-1716, Oct. 11, 1976.
7. Bloom M: Impaired physicians: Medicine bites the bullet. *Medical World News*, July 24, 1978.
8. Garb S: Drug addiction in physicians: Anesthesia and analgesia. *Current Researches*, 48:1, January 1969.
9. Green RC, Carrol GJ, Buxton WD: Drug addiction among physicians. *JAMA*, 236:12, 1372-1375, Sept. 20, 1976.
10. *The impaired physician: A treatable problem.* ISMA Impaired Physician Peer Review Committee, September 1978.
11. Korcok M: Addiction among physicians. *CMS Journal*, 117, 89-90, July 9, 1977.
12. Kosbab P: Suicide prevention in physicians. *The New Physician*, 21:1, 21-23, January 1972.
13. Litman RE: Suicide of physicians: Why does it happen and can it be prevented? *Modern Medicine*, 42:11, 34, May 27, 1974.
14. Miller M: How we can help the suicidal physician. *Medical Economics*, Jan. 23, 1978.
15. The OSMA Physician Effectiveness Program (9 articles). *Ohio State Med J*, November 1977.
16. Small IF, Small JG, Assue CM, Moore DF: The fate of the mentally ill physician. *Am J Psychiatry*, 124:10, 1333-1342, April 1969.
17. Suicidal physicians: Problem patients. *Medical World News*, 17:18, 58, Aug. 23, 1976.
18. Waring EM: Psychiatric illness in a physician: A review. *Compr Psychiatry*, 15:6, 519-530, November/December 1974.
19. Whieldon D: Drinkers, addicts, depressives: What happens when they are doctors. *Practical Psychology for Physicians*, 13-26, November 1977.

INDIANA MEDICAL BUREAU

1010 East 86th St.—72 Winterton

Indianapolis 46240

844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service

THE JOURNAL, in cooperation with he Division of Continuing Medical ducation of the Indiana University chool of Medicine, offers its read- rs a Continuing Medical Education rogram. This is the 19th in a series f CME articles, produced by the aculty of the School of Medicine nd is supported by a grant from ts Division of Continuing Medical ducation.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category 1 for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category 1 credit, complete the quiz on Page 597.



Urinary Tract Infections in Childhood

ERIC YANCY, M.D.
JERRY BERGSTEIN, M.D.
Indianapolis

Symposium Planned

The subject of urinary tract infections in childhood will be discussed in depth at a symposium entitled "Clinical Nephrology 1979." It will be conducted Friday, Sept. 28, at the Airport Hilton Hotel in Indianapolis.

Sponsored by the Kidney Foundation of Indiana and the Indiana University School of Medicine, the symposium will cover the clinical, diagnostic, and treatment aspects of hypertension, hematuria, the child with urinary tract infections, and kidney stones.

For further information, contact the Kidney Foundation of Indiana, 1010 E. 86th St., Indianapolis 46240, or the Division of Continuing Medical Education, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis 46223.

INFECTION of the urinary tract covers a broad spectrum of clinical and subclinical entities. The severity of urinary tract infections ranges from asymptomatic infections of the lower tract to fulminant pyelonephritis with the possibility of overwhelming sepsis. In children, urinary tract infections rank second in frequency only to upper respiratory infections.

Since inflammation of the urinary tract was first described by Rayer in 1839, numerous studies have been aimed at learning about these infections, and whether early detection and treatment significantly alter the development of serious renal disease. Mass screening has been carried out on children and adults, attempting to discover the true prevalence of inapparent or covert bacteriuria. With the emergence of relatively nontoxic antimicrobial therapy and non-invasive methods of evaluating urinary tract abnormalities, urinary tract infections can now be more effectively diagnosed, localized, and treated.

The purpose of this article is to discuss the diagnosis and treatment of urinary tract infections in children and to explore prognostic implications.

From the Department of Pediatrics, Indiana University School of Medicine, Indianapolis.

Reprints: Jerry M. Bergstein, M.D., Pediatric Nephrology Section, James Whitcomb Riley Hospital for Children, Indiana University School of Medicine, 1100 W. Michigan St., Indianapolis, Ind. 46223.

PREVALENCE

Widespread screening for asymptomatic bacteriuria has been carried out in newborns,[1] preschoolers[2] and school-aged children[3,4] to

determine the prevalence of significant bacteriuria. In full-term newborns who do not show signs of systemic illness, the prevalence of significant bacteriuria is extremely low. In one study of 836 healthy infants, no infections could be confirmed.[1] Because of the data obtained in that study, it is felt that the prevalence of asymptomatic infection in a normal full-term neonate is so low that routine screening of these children is not warranted. If, however, the children show signs of systemic illness, urinary tract infection must be ruled out.

The data are quite different, however, in premature infants, who were found to have a significantly higher prevalence of asymptomatic bacteriuria on routine screening. Nearly 3% of prematures have been shown to have significant bacteriuria (confirmed by suprapubic aspiration) in the absence of symptoms. It seems, therefore, advisable to routinely culture the urine of all prematurely born infants at least once during their hospital stay, using specimens collected from properly applied bags. Inconclusive cultures should be confirmed with suprapubic aspirations.

Between one month and one year of age, bacteriuria is more common in males. However, bacteriuria becomes more common in females during the preschool years. It is important to detect urinary tract infections in the preschool age group because problems such as chronically scarred and shrunken kidneys may be reduced if proper diagnosis and management of these children is carried out. Preschool children who are seen for unexplained fever or failure to thrive should have their urine examined. Because of technical difficulty and low yield, routine screening of all preschool age children is not recommended.

In school-aged girls, the prevalence of asymptomatic bacteriuria approximates 1.2 to 1.9%.[3,4] Many of these girls, when carefully questioned, have some symptoms related to the urinary tract. About one-fourth were found to have an abnormal intravenous pyelogram. Since many of the girls had spontaneous resolution of the infection and because treatment did not alter the occurrence of symptomatic infections, large-scale screening of totally asymptomatic school-aged girls is probably not warranted.

PATHOGENESIS, ETIOLOGY

Route of Infection:

In the newborn, infection of the urinary tract may result from systemic bacteremia or ascending infection via the urethra. Beyond the newborn period, the ascending route is the principal means of infection. Most of the bacteria that invade the bladder are derived from the intestinal tract. These organisms colonize the perineum; a close correlation has been found between perineal and vaginal flora and the infecting organism.[5] The organisms then progressively colonize the urethra and finally the bladder.

Anatomical Factors:

Outside the newborn age group, urinary tract infections are far more common in females than in males. Anatomical and biochemical differences that may play a role in this disparity include the shorter urethra in females as well as the absence of antibacterial prostatic secretions.

Incomplete emptying of the bladder also predisposes to an increased risk of infection. A residual of 5 ml will decrease the efficiency of bacterial elimination from the bladder.[6]

The role of reflux in the pathogenesis of urinary tract infections remains to be determined. As the ureterovesical valve-like mechanism is fully competent in the newborn, reflux detected at any age is abnormal. Normally, the ureters are implanted obliquely into the bladder wall such that a valve-like mechanism is formed. Contraction of the muscle layers of the bladder provide the "shut off" mechanism as the bladder is distended and bladder pressure increases during voiding. When there is a defect in the normal arrangement of the bladder wall musculature and ureter, such as a ureter that enters the bladder wall at right angles rather than obliquely, reflux may occur. Inflammation and edema of the bladder wall around the ureteral orifices also can lead to distortion of the normal valve mechanism and cause reflux. This is commonly seen following urinary tract infections. Many times, an inflamed refluxing ureter again will become competent once the infection and inflammation have cleared.

To simplify the description of reflux, several classifications have been used.[7] A simple classification includes three grades:

Grade I—Reflux into the lower ureter only;

Grade II—Reflux which extends to the kidney when voiding without dilatation of the ureter;

Grade III—Reflux which extends to the kidney with dilatation of the calyces and ureter.

Chronically refluxing ureters have been associated with a high incidence of renal damage. Thus, reflux therefore demonstrated radiographically in the evaluation of a child with a urinary tract infection is of great concern. However, the presence of reflux is not an absolute indication for surgical intervention. As most reflux is due to infection, it may resolve if the urine can be maintained free of infection with long-term suppressive antibiotic therapy and frequent micturition to eliminate residual urine.

Etiology:

Most urinary tract infections are aused by bacteria. However, other gents rarely may be responsible for nfection or infestation of the uri- ary tract, such as viruses, Lepto- pira, tuberculosis, Mycoplasma, nd schistosomiasis.

Of the bacterial infections, most re caused by the various serotypes f E. coli.[8] Other organisms that re less frequently urinary tract athogens include coagulase nega- ive staphylococci, Proteus, Kleb- iella, and Pseudomonas. Rarely, H. nfluenza, pneumococcus, and strep- ococcus have been detected as in- ecting organisms.

Signs and Symptoms:

Symptoms of infection vary con- iderably with the age of the child. n the newborn, infections may be otally asymptomatic. However, clues such as poor feeding, vomit- ng, jaundice and temperature in- tability may suggest the possibility of a urinary tract infection.

Even beyond the newborn period, the symptoms may remain quite non-specific. Irritability, un- explained fever, vomiting, abdomi- nal pain, diarrhea and failure to thrive may suggest infection of the urinary tract.

Children of school age generally present with symptoms similar to those experienced by adults, such as frequency, dysuria, urgency and enuresis. However, even in this age group, symptoms may be non- specific.

Physical examination in the new- born or preschool child may not suggest urinary tract infection. In the older child, examination may reveal costo-vertebral angle tender- ness or mild abdominal tenderness. In children of all ages, a careful abdominal exam should be per- formed to rule out an abdominal mass resulting from a hydrone- phrotic kidney.

DIAGNOSIS

Once a urinary tract infection is suspected, certain studies must be performed to confirm the diagnosis. The easiest tests to perform on the urine are those requiring only dip- stick analysis. Nitrate dipsticks have been used for many years to give some indication of bacteriuria.[9,10] Although they may provide useful information at the time of some in- fections, there are considerable drawbacks to their use. The dip- stick's change in color is dependent on bacterial conversion of nitrate to nitrite. Only certain gram-negative organisms can produce this reac- tion. Thus, infections caused by some gram-negative and all gram- positive organisms will be missed.

TABLE
Causes of Sterile Pyuria

Tuberculosis
Mycoplasma
Viruses
Urethritis
Vaginitis
Foreign body
Tumor
Interstitial nephritis
Homograft rejection
Acute tubular necrosis
Nephrosclerosis
Diabetes
Amyloidosis
Glomerulonephritis

Another problem with the nitrate dipsticks is that a large quantity of organisms must be present in the urine to produce the desired reac- tion. Therefore, the technique is only valid on a first-voided morn- ing specimen. Even if the testing is done under ideal conditions, studies show that 7 to 42% of gram- negative infections may remain un- detected.[11-13] Thus, nitrate dipsticks alone may not be relied upon for the diagnosis of urinary tract in- fections.

Evaluation of the urine sediment should include microscopic exami- nation for pyuria. However, the correlation between the number of WBC/HPF and infection is poor.[14] Riley has shown that 21% of pa- tients with greater than 5 WBC/ HPF had a negative culture.[15] Ad- ditionally, many nonbacterial causes of pyuria have been described *(Table)*. Thus, it is recommended that the diagnosis of urinary tract infection not be made on the basis of pyuria alone.

The most accurate method of diagnosing a urinary tract infection is the quantitative culture. In a clean-catch, midstream urine spe- cimen, the presence of greater than 100,000 colonies per ml is 95% ac- curate in detecting true infection.[16] If the culture grows from 10 to 100,000 colonies, an infection is probable but the culture should be repeated. Colony counts of less than 10,000/ml usually indicate contamination.

Clean-catch, midstream urine specimens are difficult to obtain in young children. Carefully collected bag specimens (area cleansed with soap and water and bag left on only for a short period of time) may provide a satisfactory specimen. A sterile bag specimen rules out in- fection. However, any growth, even more than 100,000 colonies per ml, should be confirmed by suprapubic bladder aspiration or catheteriza- tion. In a suprapubic aspirate, any bacterial growth is generally felt to be significant.

Recently, new techniques have been developed to simplify the cul- ture technique. Dip-slides contain- ing agar are most widely used. Stud- ies done on Microstix and Uricult slides have shown a good correla- tion with quantitative urine culture. False negative results using Micro- stix have ranged from 4-9% where- as false positive results have ranged from 1-4%. False negative results

using Uricult slides have been negligible and false positive results have ranged from 2-2.5%.[17,18]

TREATMENT, MANAGEMENT

Since most acute lower urinary tract infections are caused by E. coli and since most strains of E. coli are sensitive to sulfisoxazole (Gantrisin), this agent is commonly used as initial therapy. The dose is 150 mg/kg/24 hours with an initial loading dose of half the 24-hour dose. Ampicillin in a dose of 50-100mg/kg/24 hours is equally effective but somewhat more expensive. It has no definite advantage over sulfonamides unless specific antibiotic sensitivities dictate its use. Other drugs, such as the cephalosporins and nitrofurantoin, are again more expensive and have no definite advantage. Both nitrofurantoin and the combination of trimethoprim-sulfamethoxazole have been used with good results as suppressive agents in patients with recurrent infections.[19,20]

For serious infections of the upper tract, parenteral antibiotics are indicated. Therapy in these children should be guided by the results of the urine culture and sensitivity. Before these results are available, Gentamicin would be considered the drug of choice because of its broad spectrum of activity and good tissue levels. Once sensitivity data is available, appropriate adjustments in the therapy can be made. In the face of diminished renal function, antibiotic dosages may require modification.

For uncomplicated urinary tract infections, 10 days of therapy seem adequate. However, recurrent infections with the same organism (relapse) suggest renal parenchymal infection and may require prolonged antibiotic therapy (e.g., six weeks).

Follow-up urine culture should always be performed one week after completion of therapy. Most recurrences will occur within the first six months following an acute infection. A child with an uncomplicated infection should have follow-up cultures every three months for one year after the infection and every six months during the following year. Recurrent infections should be called to the attention of a Nephrologist or Urologist.

Evaluation of Urinary Tract Anatomy:

Radiographic studies may be indicated in certain children with urinary tract infections because of the high risk of significant anatomic abnormality. Traditionally, the first infection in males and second in females have been evaluated by intravenous pyelogram and voiding cystourethrogram. However, recent studies indicated that 80% of girls who have one infection will have another.[4] Thus, we suggest that all boys at any age and all girls under the age of 10 years have radiographic studies following their first infection. Cystoscopy is not routinely required unless significant anatomic abnormality is discovered.

BIBLIOGRAPHY

1. Edelman CM, *et al:* The prevalence of bacteriuria in full-term and premature newborn infants. *J Pediatr,* 82:125-132, 1973.
2. Boothman R, *et al:* Prevalence of urinary tract infection in children of preschool age. *Arch Dis Child,* 49: 917-922, 1974.
3. Newcastle Asymptomatic Bacteriuria Research Group: Asymptomatic bacteriuria in school children in Newcastle-upon-Tyne. *Arch Dis Child,* 50:90-102, 1975.
4. Kunin CM, *et al:* Urinary tract infection in school children: Prevalence of bacteriuria and associated urologic findings. *N Engl J Med,* 266:1287-1301, 1962.
5 Stamey TA: The role of introital enterobacteria in recurrent urinary tract infections. *J Urology,* 109:467-472, 1973.
6. Lindberg U, *et al:* Asymptomatic bacteriuria in school girls. III. Relation between residual urine volume and recurrence. *Acta Pediatr Scand,* 64:477-484, 1975.
7. Smellie JM: Medical aspects of urinary infection in children. *J R Coll Physicians (Lond),* 1:189-196, 1967.
8. Neter E, *et al:* Study on etiology, epidemiology, and antibiotic therapy of infantile diarrhea, with particular reference to certain types of Escherichia coli. *Am J Pub Health,* 41: 1490-1499, 1951.
9. Kunin CM, De Groot J: Self-screening for significant bacteriuria. *JAMA,* 231:1349-1353, 1975.
10. Kunin CM, DeGroot JE: Sensitivity of a nitrite indicator strip method in detecting bacteriuria in preschool girls. *Pediatrics,* 60:244-245, 1977.
11. Skelton IJ, *et al:* Urinary tract infections in childhood. The place of the nitrite test. *Med J Australia,* 1:882-886, 1977.
12. Scheifele DW, Smith A: Home testing for recurrent bacteriuria, using nitrite strips. *Am J Dis Child,* 132:46-48, 1978.
13. Litvak AS, *et al:* A clinical evaluation of a screening device (Microstix) for urinary tract infections. *South Med J,* 69:1418-1419, 1976.
14. Pryles CV, Eliot CR: Pyuria and bacteriuria in infants and children. *Am J Dis Child,* 110:628-635, 1965.
15. Riley HD Jr: Evaluation of a method for detecting and following urinary tract infection in females without catheterization. *J Lab Clin Med,* 52:840, 1958.
16. Kass EH: Asymptomatic infections of the urinary tract. *Trans Assoc. Am Physicians,* 69:56-63, 1956.
17. Ellner PD, Papachristos T: Detection of bacteriuria by dip-slide. *Am J Clin Pathol,* 63:516-521, 1975.
18. Gillenwater JY, *et al:* Home urine cultures by the dip-strip method: Results in 289 cultures. *Pediatrics,* 58:508-512, 1976.
19. Stamey TA, *et al:* Prophylactic efficacy of nitrofurantoin macrocrystals and trimethoprim-sulfamethoxazole in urinary infections. *N Engl J Med,* 296:780-783, 1977.
20. Tulloch AL: Pancytopenia in an infant associated with sulfamethoxazoletrimethoprim therapy. *J Pediatr,* 88:499-500, 1976.

RICHARD H. APPEL, M.D.
Indianapolis

Clinical Notes

Value of Routine Sigmoidoscopies

AS WITH OTHER MEDICAL TESTS, sigmoidoscopies have increased greatly in symptomatic cases, but more so in asymptomatic cases, particularly in connection with yearly examinations. Within memory rectal blood was considered to be almost as normal as menstrual blood. Little attention was given to it. Perhaps we have gone from one extreme to another.

Following a routine sigmoidoscopic examination, some patients will admit to a feeling of relief. Is this the result of our over-conscious cancer publicity? Fear is a handicapping state of mind.

Sigmoidoscopies, when indicated by symptoms, are among the most valuable of investigative tools. But what of routine uses, with their shortcomings? These are based on the limitation of range and restriction. In some people scopes cannot penetrate to their full length because of short mesacolons, sharp angles, narrow segments, pain, and poor prep. Failure may occur even under general anesthesia. Since the recto-sigmoid area seems to be the area most susceptible to disease, it should receive the most consideration. Because of the above, it receives the least.

One patient was scoped in the office, and complete insertion of the scope was achieved, resulting in the discovery of some innocent polyps in the lower sigmoid. With general anesthesia, additional penetration, resulting from a relaxed perineum, revealed a small, ulcerating CA. An apparent cure was obtained as judged by a four-year follow-up.

Cursory examinations somehow leave a feeling of having done an inadequate job. In patients with symptoms, other tests such as x-rays, coloproctoscopies, etc., may be imperative, but quite expensive. They are out of the question for routine exams. Also, how frequently should routine exams be conducted? Malignant growths like undesired fetuses should be removed early, for a good result. Unlike a fetus, the age of a growth cannot be accurately determined. Because of lack of measurements, early diagnosis, as related to cures, cannot be pinpointed to any degree. Nor does it help to decide the time intervals between exams.

What is an adequate scheduling for routine sigmoidoscopic examinations? To be effective in discovering really early malignancies, thus hopefully achieving a better mortality rate, should routines be done annually, semi-annually or quarterly?

While waiting on the disposal of his wife's case, in a world-famous clinic, a 50-year-old male submitted to a complete physical examination and was given a clean bill of health. He subsequently appeared in the office, some six months later, with only the report of change of bowel habit from early morning to late afternoon. An easily found CA. was located in the rectal pouch, which was followed by surgery and later death. When did it start?

The 70-year-old mother of a doctor appeared in the office complaining only of slight bleeding of a month's duration. Sigmoidoscopic examination revealed the presence of an ulcerating lesion in the mid pouch, about 3/8 of an inch in diameter. Chest films reported metastatic invasion of both lungs. Death occurred a short time later.

Apparently the goal of early, effective diagnosis of lower bowel malignancies is very elusive. Witness the number of deaths recorded in the obituary page of the JAMA, of doctors who die of large bowel malignancies. Routine sigmoidoscopies and surgery have given only poor results. It may be that because of the bowel's absorptive ability, and thin membrane, malignancies tend to metastasize sooner from this area than from other sites. In cases in which multiple polyps have been found, and removed, it may be well to have very frequent examinations, because of their tendency to develop malignancies.

During the course of several hundred routine sigmoidoscopies, two innocent polyps were found in one individual. The most frequent finding was evidence of pruritis. With the acceptance of routine sigmoidoscopies as a part of yearly physicals, or check-ups, may they be subject to abuse or overuse? They are a lucrative part of office practice. And they may give a false sense of security.

There has been an amazing increase in the number of sigmoidoscopies of asymptomatic patients. Personal experience indicates that they are of little or no value. Because of their shortcomings, mentioned above, they are apt to be inconclusive and faulty. Thorough investigation would require additional steps, not available because of cost and time involved. Often when pathology might be found, the end results will probably be poor. In keeping with present attitudes, I suggest that routine sigmoidoscopies be done on request, but not suggested or urged.

A REVIEW:
Adverse Effects of Oral Contraceptives

SWEI H. TSUNG, M.D.
WEI-PING LOH, M.D.
Gary

SINCE ITS INTRODUCTION in 1960, oral contraceptives have become the most popular form of birth control. An estimated 8 million women in the U.S. and 50 million worldwide were taking the pill in 1976. The use of the pill has accomplished the goal of reducing unplanned and unwanted births. However, a number of problems have arisen. The purpose of this review is to describe the adverse effects of the oral contraceptives.

HYPERTENSION

It is well recognized that the use of oral contraceptive agents may be associated with hypertension. The reported incidence of hypertension among users of oral contraceptives has varied from 2% to 18%.[1,2] Hypertension has been widely ascribed to alterations of the renin-angiotensin system,[3] because estrogen increases hepatic synthesis of the protein substrate, angiotensinogen, upon which the enzyme renin acts to produce the pressor hormone, angiotensin.[4] However, this does not provide a completely satisfactory explanation. Another mechanism may be operative such as dopamine-B-hydroxylase. This enzyme catalyzes the conversion of dopamine to norepinephrine.

The known predisposing factors identified are (a) increasing age, (b) obesity and (c) a positive family history of hypertension. In about half of the users, the blood pressure returns to normal when the pill is stopped. In most women, the rise in blood pressure is minimal but, in some, severe and rapidly accelerating hypertension may cause renal damage.[6,7]

THROMBOEMBOLISM

Most researchers have found an increased risk of both peripheral venous thrombosis and pulmonary embolism in oral contraceptive users. The mechanism whereby estrogen induces or facilitates intravascular coagulation is obscure, although many elements of clotting process have been described as abnormal among patients receiving oral contraceptives. Oral contraceptives may change the coagulation and fibrinolytic systems which favor clotting, including increased platelet sensitivity;[8] decreased plasma antithrombin III activity[9] and reduced activated factor X inhibitory activity.[10] The oral contraceptives can enhance coagulation by decreasing the negative surface charge on vessel walls and blood cells.[11] The occurrence of thromboembolism appears to be dose-related. A study

From the Department of Pathology, Methodist Hospital of Gary, Inc., 600 Grant St., Gary, Ind. 46402.

emonstrated that the lower estro-
en content in the newer oral con-
raceptives resulted in a relatively
ower risk as compared to the
igher estrogen-containing prepara-
ion.[12]

MYOCARDIAL INFARCTION

Several studies have demon-
trated an association of oral con-
raceptives with myocardial infarc-
ion, fatal or nonfatal.[13-15] Women
30-39 years of age who are on the
ill have the risk threefold greater
han comparably aged women who
lo not use the pill. The risk from
ral contraceptive use acts synergis-
ically with cigarette smoking, hy-
ertension, diabetes, and hyper-
holesterolemia; women with three
r more of these risk factors have a
28-fold increased risk of myo-
ardial infarction.[16]

Ory[17] suggested that women 30
o 39 years of age who have any of
he three predisposing conditions
hould be warned against oral con-
raceptives. If they are 40 years of
ge or older and have any of those
predisposing factors, they should
not take oral contraceptives.

CEREBRAL VASCULAR DISEASE

The results of a study[18] of 598 women indicate a 9.5 times greater risk of thrombotic stroke and a 2.0 times greater risk of hemorrhagic stroke among the pill users. Oral contraceptive alone was found to be a risk factor for stroke, in the absence of smoking or hypertension. The combination of severe hypertension and oral contraceptive use markedly increases the risk of hemorrhagic stroke.

HEPATIC ADENOMA

In 1973, Baum, *et al*[19] suggested the possible association between benign hepatic adenoma and oral contraceptive therapy. This initial report has been followed by numerous articles documenting similar observations.[20]

Of 88 cases of hepatic cell adenoma occurring in women, in the file of the Armed Forces Institute of Pathology, 92% had taken oral contraceptives for one year or longer.[21] Development of hepatic cell adenoma is associated with prolonged pill use and for women over 27 years old, the relative risk rises rapidly with duration of pill use.

Mestranol-containing preparation is considered more hazardous than ethinyl estradiol-containing compound.[22] McAvory, *et al*[20] reviewed the literature and found 12 of 35 patients who had massive intraperitoneal bleeding; five deaths have been reported as a result of bleeding. Andersen and Packer[23] suggested that these tumors may regress or remain dormant after withdrawal of the pill.

OTHER RARE COMPLICATIONS

Pulmonary hypertension was reported in six women using the pill.[24] Peripheral arterial occlusion[25] and mesenteric vascular insufficiency with massive colonic bleeding have been seen.[26] Budd-Chiari syndrome and a noninflammatory cholestatic injury of liver have been ascribed to oral contraceptives.[27-29] In 1977 Wu, *et al*[28] reviewed 14 reported cases of Budd-Chiari syndrome after taking oral contraceptives, and added one of their own case.

BREAST CANCER

There has long been a suspicion that oral contraceptives may cause breast cancer. However, despite this suspicion, benign breast disease in women biopsied for suspected breast cancer appears to be negatively related to oral contraceptive use.[30]

CONCLUSIONS

The pill is safe for most young women for birth control and family planning. Some problems associated with using the pill are serious and could be fatal. Several precautionary measures which might possibly minimize the adverse effects of oral contraceptives should be emphasized.[31]

1. Women with a prior thromboembolic disorder should be advised to consider alternate methods of contraception.
2. Alternate forms of contraception should be given to those who are above age 35, obese, hypertensive, or smoking cigarettes.
3. If the pill is chosen for such women, weight reduction, control of hypertension, and abandonment of cigarette smoking should be advised.
4. Never provide more than a six-month supply without requiring that the women return for surveillance.
5. If the blood pressure goes above 140/90 mmHg, discontinue the pill if possible. If it cannot be discontinued, keep blood pressure down with appropriate antihypertensive therapy, starting with diuretics.
6. Check the serum triglyceride and cholesterol after six months use of the pill. If they are elevated, stop the pill.
7. Consider use of low-dose heparin therapy whenever a woman using oral contraceptives undergoes trauma, surgery, or prolonged bed rest.
8. Choose ethinyl estradiol-containing compound.

In summary, the risks of pill use may outweigh its benefits. Therefore, the risks must be balanced against their remarkable benefits by prudent use of the pill.

REFERENCES

1. Weir RJ, Briggs E, Mack A, *et al*: Blood pressure in women after one year of oral contraception. *Lancet*, 1:467-470, 1971.
2. Woods JW: Oral contraceptives and hypertension. *Lancet*, 2:653-654, 1967.
3. Laragh JH, Baer L, Brunner HR, *et al*: Renin angiotensin and aldosterone system in pathogenesis and management of hypertensive vascular disease. *Am J Med*, 52:633-652, 1972.
4. Helmer M, Griffith RS: The effect of the administration of estrogens on the renin-substrate content of rat plasma. *Endocrinology*, 57:421-426, 1952.
5. Rockson SG, Stone RA, Gunnels JC, *et al*: Plasma dopamine-B-hydroxylase activity in oral contraceptive hypertension. *Circulation*, 51:916-923, 1975.
6. Zackerle BJ, Richardson JA: Irreversible renal failure secondary to hypertension induced by oral contraceptives. *Ann Intern Med*, 77:83-85, 1972.
7. Schoolwerth AC, Sander RS, Klahr S, *et al*: Nephrosclerosis postpartum in women taking oral contraceptives. *Arch Intern Med*, 136:178-185, 1976.
8. Bolton CH, Hampton JR, Mitchell JRA: Effect of oral contraceptive agents on platelets and plasma phospholipids. *Lancet*, 1:1336-1341, 1968.
9. Sager S, Thomas DP, Stamatakis JD, *et al*: Oral contraceptives, antithrombin III activity, and postoperative deep vein thrombosis. *Lancet*, 1:509-511, 1976.
10. Wessler S, Gitel SN, Wan LS, *et al*: Estrogen-containing oral contraceptive agents. A basis for their thrombogenicity. *JAMA*, 236:2179-2182, 1976.
11. Srinivason S, Solash J, Redner A, *et al*: The alteration of surface charge characteristics of the vascular system by oral contraceptive steroid. *Contraception*, 9:291-303, 1974.
12. Stolley PD, Tonascia JA, Tockman MS, *et al*: Thrombosis with low-estrogen oral contraceptives. *Am J Epidemiol*, 102:197-208, 1975.
13. Mann JL. Vessey MP, Thorogood M, *et al*: Myocardial infarction in young women with special reference to oral contraceptive practice. *Br Med J*, 2: 241-245, 1975.
14. Mann JL, Thorogood M, Walters WE, *et al*: Oral contraceptive and myocardial infarction in young women. A further report. *Br Med J*, 3: 631-632, 1975.
15. Mann JL, Inman WHW, Thorogood M: Oral contraceptive use in older women and fatal myocardial infarction. *Br Med J*, 2:445-447, 1976.
16. Mann JL, Doll R, Thorogood M, *et al*: Risk factors for myocardial infarction in young women. *Br J Prev Soc Med*, 30:94-100, 1976.
17. Ory H: Association between oral contraceptives and myocardial infarction. *JAMA*, 237:2619-2622, 1977.
18. Collaborative group for the study of stroke in young women. Oral contraceptive and increased risk of cerebral ischemia or thrombosis. *N Engl J Med*, 288:871-878, 1973.
19. Baum J, Bookstein J, Holtz F, *et al:* Possible association between benign hepatomas and oral contraceptives. *Lancet*, 1:926-929, 1973.
20. McAvory JM, Tompkins RK, Longmire WP: Benign hepatic tumors and their association with oral contraceptives. *Arch Surg*, 111:761-767, 1976.
21. Rooks JB, Ory HW, Ishak KB, *et al*: The association between oral contraception and hepatocellular adenomas-a preliminary report. *Int J Gyneco Obstet*, 15:143-144, 1977.
22. Edmondson HA, Benton B, Henderson BE: Liver cell adenomas associated with use of oral contraceptives. *N Engl J Med*, 294:470-472, 1976.
23. Andersen PH, Packer JT: Hepatic adenoma. *Arch Surg*, 111:898-900, 1976.
24. Kleiger RE, Boxer M, Ingham RE, *et al*: Pulmonary hypertension in patients using oral contraceptives. A report of six cases. *Chest*, 69:143-147, 1976.
25. O'Connor J, Pollock JG: Acute arterial occlusion and the contraceptive pill. *J Cardiovas Surg*, 16:176-180, 1975.
26. Prust FW, Kumar GK: Massive colonic bleeding and oral contraceptive pill. *Am J Obstet Gynecol*, 125: 695-698, 1976.
27. Alpert LI: Veno-occlusive disease of the liver associated with oral contraceptives: *Human Pathol*, 7:709-718, 1976.
28. Wu SM, Spurny OM, Klotz AP: Budd-Chiari syndrome after taking oral contraceptives. *Am J Diag Dis*, 22:623-628, 1977.
29. Ockner R, Davidson CS: Hepatic effects of oral contraceptives. *N Engl J Med*, 276:331, 1967.
30. Boston collaborative drug surveillance program: Oral contraceptives and venous thromboembolic disease, surgically confirmed gallbladder disease, and breast tumors. *Lancet*, 1: 1399-1404, 1973.
31. Kaplan NM: Cardiovascular complications of oral contraceptives. *Ann Rev Med*, 29:31-40, 1978.



McClain Car Leasing, Inc.

1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA

Vertebrobasilar Insufficiency

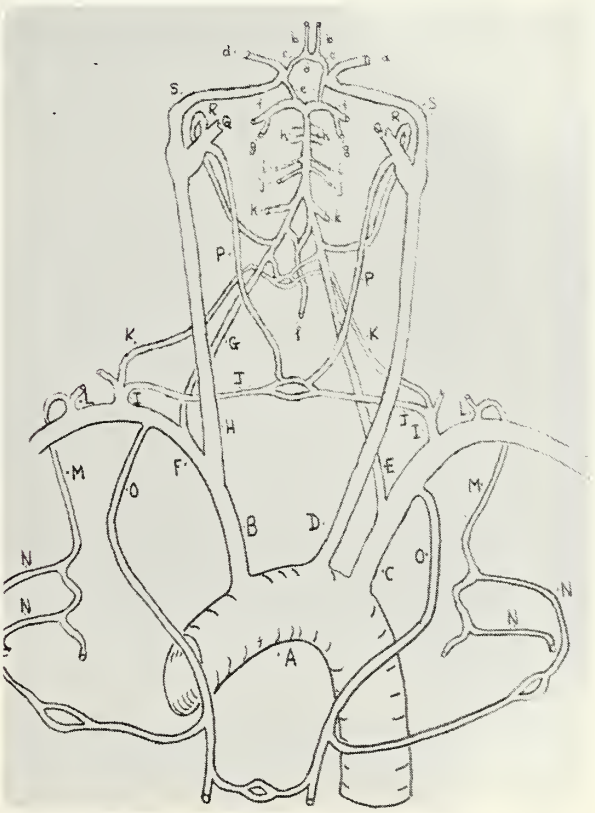


FIGURE 1
Collateral Artery Circulation
Numerous collateral arteries provide flow to the distal subclavian artery. The vertebral arteries represent only one—functionally significant—collateral.

The Peripheral Vascular Conferences at St. Vincent Hospital are open to all and are held at noon on the second Friday of each month. An informal discussion format is planned. Presentations in the last year have included discussion of percutaneous angioplasty by Donald Schwarten, M.D.; non-invasive cerebrovascular evaluation by David Sumner, M.D.; endothelial seeding by Malcoln Herring, M.D.; coagulation problems by Nils Bang, M.D.; aneurysms by John Bergan, M.D.; and presentations by Gilman Peterson, M.D.

The Goethe Link Centenary Vascular Laboratory will be dedicated in October. The dedication will be made by H.H.G. Eastcott, M.S., F.RCS, London, England.

THE VAGUE MIXED BAG of symptoms of vertebrobasilar insufficiency contrasts sharply with the rather definite signs manifest by this condition, although early signs can be quite subtle. The goal of making a diagnosis is elusive; successful management is challenging.

The conference subject of vertebrobasilar insufficiency was suggested when two patients with quite different degrees of left subclavian artery disease were evaluated and released the same day after they had both promised to stop smoking.

CASE NO. 1

Case No. 1 was presented by J. M. Jesseph, M.S. A 61-year-old white female was admitted May 31 with the chief complaint of right thigh and calf claudication for six months. Pain appeared when she

The subject of vertebrobasilar insufficiency was discussed June 8, 1979 during the Peripheral Vascular Conference conducted at St. Vincent Hospital, Indianapolis. This report was prepared by Austin L. Gardner, M.D. and Malcolm B. Herring, M.D., both of Indianapolis.





FIGURES 2a, 2b

Case No. 1: Early and late left posterior oblique arch aortagram views show left vertebral steal. Bilateral internal carotid occlusion is less evident.

walked less than two blocks; it was relieved by rest. Dependent rubor was noted in both feet and she complained of occasional dizzy spells and blurring of vision. She stopped driving because of the dizziness. She had smoked cigarettes for many years. Past medical history included a hysterectomy 30 years before, rheumatoid arthritis treated with gold injections, Motrin and aspirin since 1970 and a splenectomy for "destruction of white corpuscles" two years prior to this admission.

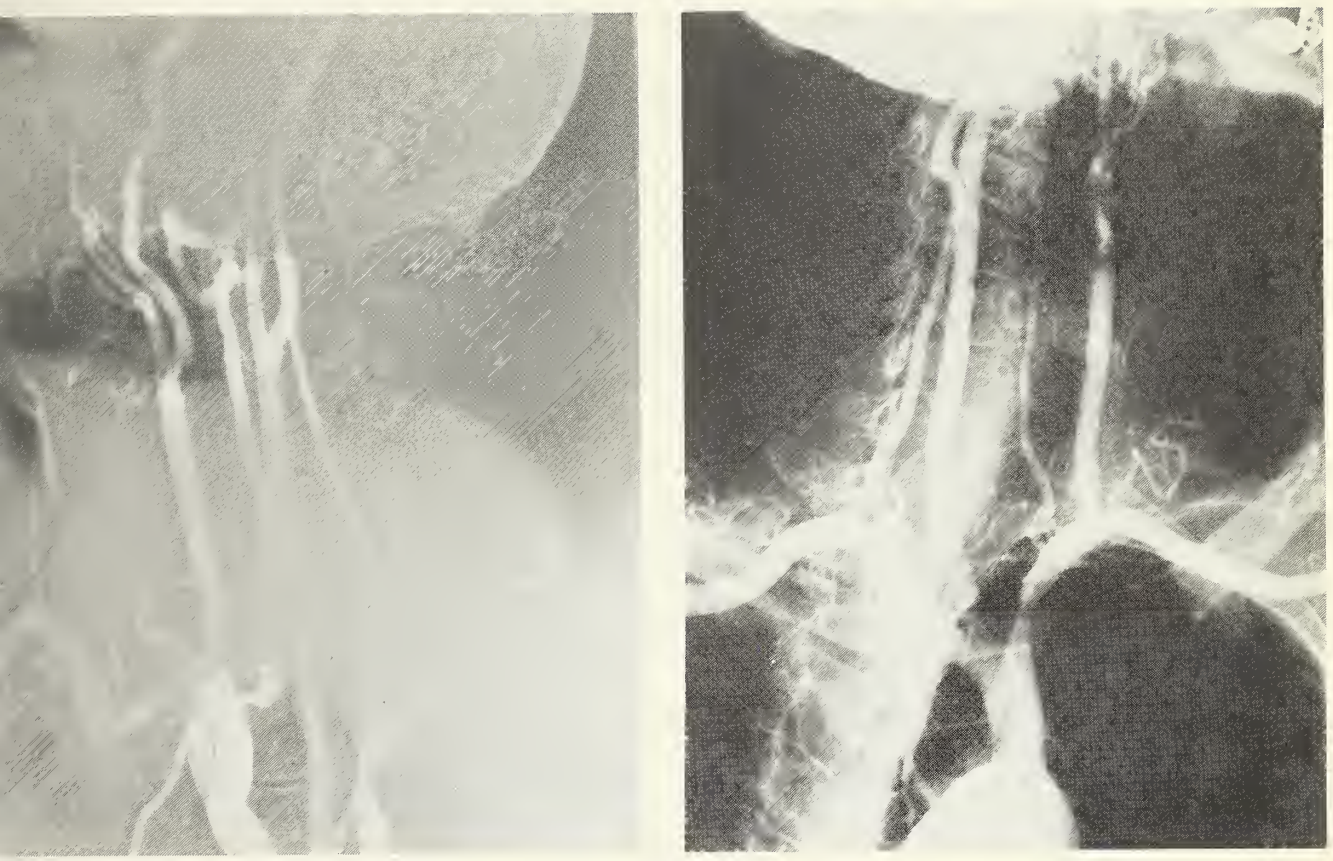
Physical examination revealed bilateral carotid and supraclavicular bruits. No pulses were palpable below the aortic bifurcation. Blood pressure in the right arm was 140/70 and in the left arm systolic pressure was 80 with an undetectable diastolic pressure.

Upon further questioning, the patient revealed that the episodes of visual blurring were bilateral, not associated with activity, and not accompanied by vertigo or dysarthria. She also denied hemiparesis and hemianesthesia.

The Doppler and arteriogram interpretation was presented by Gilman Peterson, M.D., Fellow in Vascular Surgery.

The Doppler study shows bilateral subclavian artery stenoses with possible occlusion of the left subclavian artery. There is also bilateral internal carotid artery stenosis or occlusion.

The early phase of the arch aortogram reveals a total occlusion of the left subclavian artery at its origin. There is also a stenosis of the right subclavian artery. Both internal carotid arteries are occluded; the right vertebral artery is very large; the late phase of the arch aortogram reveals retrograde filling of the left vertebral artery followed by filling of the left subclavian artery. This patient's cerebral circulation and left arm circulation are all supplied by the right vertebral artery, which sets the stage for a vertebral steal syndrome on the left.



FIGURES 3a, 3b

Case No. 2: Right and left posterior oblique views reveal mild left subclavian and mild bilateral carotid stenosis.

CASE NO. 2

Case No. 2 was presented by Austin Gardner, M.D. A 54-year-old white male was admitted May 31 complaining of a "swishing sound" in his left ear for six months along with transient episodes of weakness with loss of vision and feeling fuzzy. The swishing sound, which he noted mostly at night, was bothersome and the episodes of weakness and visual loss were becoming more frequent and frightening. The patient is a borderline diabetic, had a myocardial infarct in the past and at the time of this admission was taking Pronestyl, Lanoxin, Inderal, Nitrobid and aspirin. He also smoked cigarettes. An initial physical examination revealed a left carotid bruit and blood pressure within normotensive range. On re-evaluation a bruit was also noted over the left subclavian artery and the blood pressure in the right arm was 110/70 while in the left it was 106/90—a consistent narrowing of his pulse pressure.

The Doppler study revealed the left brachial wave form to have no negative flow component, indicating subclavian axillary or brachial stenosis.

The arch aortogram revealed slight irregularity and insignificant stenosis of the internal carotid arteries on both sides and a moderate left subclavian artery stenosis near its origin.

Drs. Robert Robinson, Joseph Morton, William Nasser, Phil Bendick and members of the House Staff discussed the problems with the patients and recognized the extreme spectrum of organic changes represented by these two patients. The subtle signs on examination of the second patient were emphasized and the tremendous capacity of the body to develop collateral flow recognized in the first patient. Both will be managed conservatively for the time being.

DISCUSSION

Discussion by Malcolm Herring, M.D.: The study of the subclavian steal syndrome is indeed interesting. In 1959 Contorni described the angiographic event showing reversal of vertebral flow. Reivich and his associates in 1961 recreated the steal phenomenon in dogs. Their associates were also able to correct the neurologic symptoms with a subclavian reconstruction in patients. Interestingly, Smyth had postulated the disease back in 1866 but this was not widely publicized and was forgotten until Contorni's efforts.

Many situations give rise to subclavian steal; however, the most prominent is atherosclerotic occlusive disease of the innominate or proximal subclavian arteries. This gives rise to a blood pressure gradient between the basilar system and the distal subclavian artery, resulting in neurological dysfunction. Reivich and his associates pointed out that a pressure gradiant of 20 torr must exist to induce retrograde flow in a vertebral artery. The blood pressure difference between the two arms reflects this basilar subclavian gradient. A number of factors can accentuate the gradient. Systemic hypertension and revascularization of the carotids or contralateral subclavian arteries may serve to raise the gradient. Patients may have dizziness, syncope, vertigo, ataxia, and also symptoms more commonly associated with the carotid distribution such as a unilateral deficit, cephalalgia, paresthesia, visual defects, aphasia and memory loss. These "carotid distribution" symptoms are present in approximately 20% of patients. A number of diseases may be confused with subclavian steal syndrome.

The Doppler flow velocity studies now offer a non invasive wave analyzing subclavian steal by determination of the brachial blood pressure gradient and sometimes the assessment of the flow direction in the vertebral artery in addition to the wave form as demonstrated in our second patient. In many patients, particularly those who have labile hypertension, the vertebral steal may not be demonstrated at the time of study. It may be occurring, nonetheless, probably as intermittently as the symptoms. The instances may be brought on by postocclusive study. In this study a tourniquet on the affected extremity is inflated to above systolic pressure for about three minutes. When it is released, the vertebral artery flow direction is monitored and reversal of flow may be induced.

Another study which has become more prominent recently in the assessment of patients who have vertebrobasilar symptoms is the electronystagmogram.

The surgical treatment of the subclavian steal syndrome is directed toward normalizing the distal subclavian pressures. The carotid subclavian bypass, the subclavian bypass and the axillary bypass are examples of "extra-anatomic shunts." These operations provide satisfactory flow to the extremity and minimize morbidity and mortality. The question was raised early in the application of this operation as to whether the carotid subclavian bypass would induce a steal in the carotid circulation. This does not occur even under maximal vasodilation unless there is a proximal, carotid artery stenosis. With the advent of the extra anatomic revascularization, the mortality and morbidity of the treatment for this disease has been sharply reduced. The results have been gratifying.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.

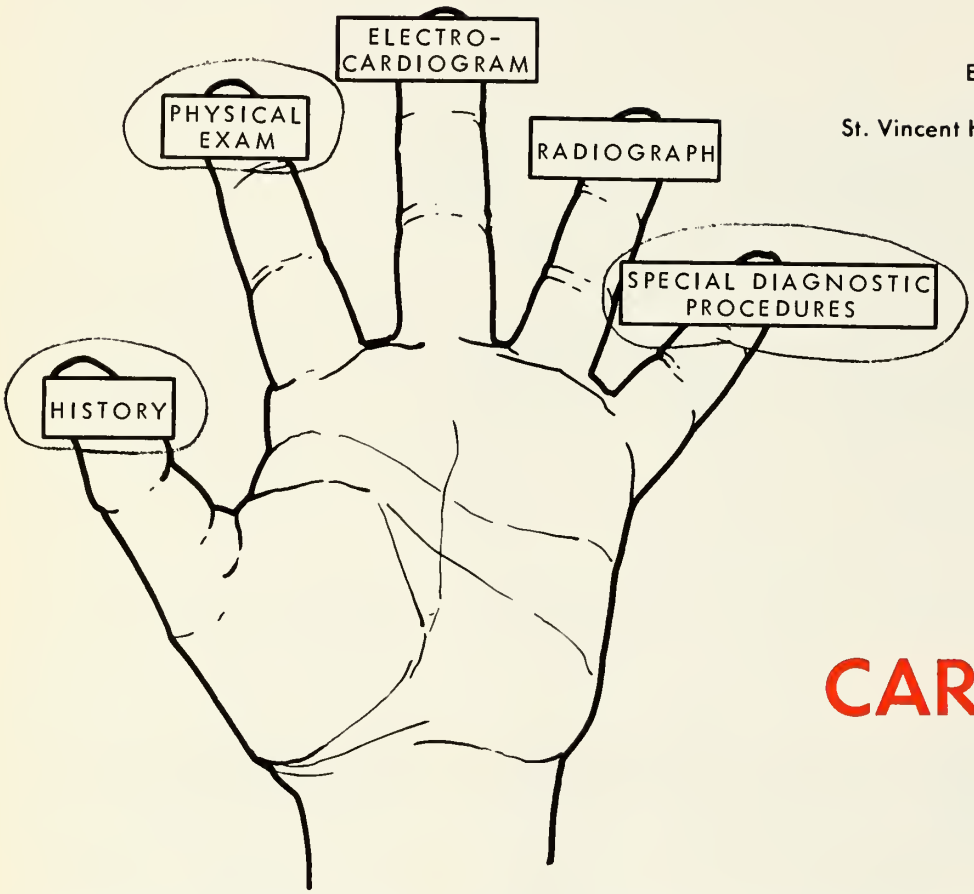


Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

A Self-Assessment



R. JOE NOBLE, M.D.
E. F. STEINMETZ, M.D.
C. C. HALLAM, M.D.
St. Vincent Hospital and Health Care Center
Indianapolis

THE FIVE FINGERS OF CARDIOLOGY

A 23-year-old man underwent the Blalock-Taussig anastomosis at age 3 for congenital, cyanotic heart disease with excellent results. However, in the intervening years he has remained cyanotic, his effort tolerance has been limited, and he has been treated on three occasions for infectious endocarditis.

Without preceding gastrointestinal symptoms, the patient suddenly developed massive hematemisis and transient shock. Upon admission to the hospital, the hemoglobin was 24, and hematocrit 68%.

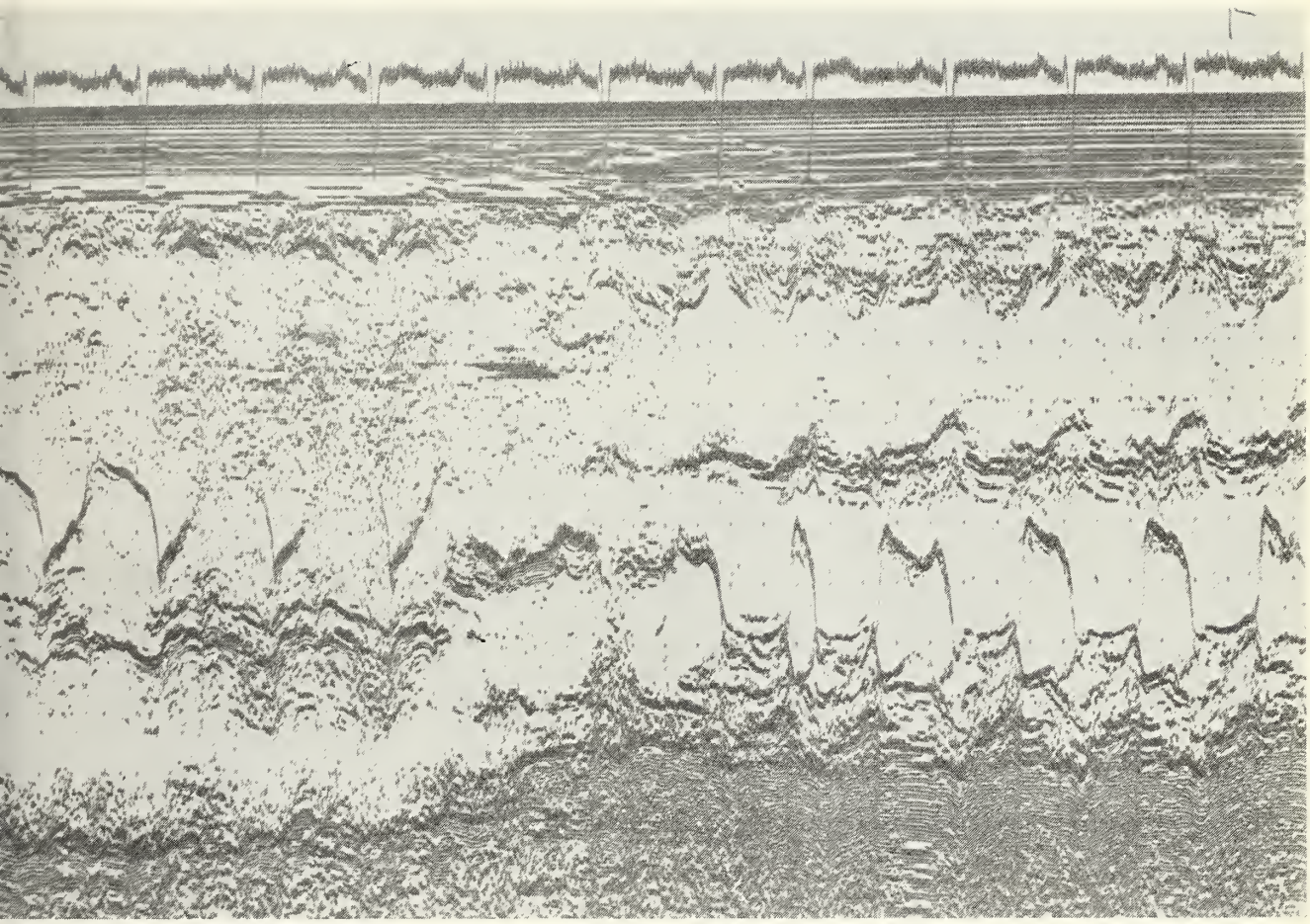
Physical examination demonstrated marked cyanosis and clubbing. The left precordium was prominent and the right ventricular impulse palpable. A Grade III/VI systolic ejection murmur was audible at the base, and the second heart sound was single. The abdominal examination and remainder of the general examination were unremarkable. The ECG demonstrated right ventricular hypertrophy. The echocardiogram is illustrated.

QUESTIONS

1. What is the etiology of the G.I. bleeding? What is the mechanism of polycythemia? What is the therapy for both?
2. What are the possible complications of polycythemia?
3. What are the serious complications of this type of cyanotic congenital heart disease?
4. Is total surgical repair of the congenital deformity possible and indicated?

The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac-diagnosis.

Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.



ANSWERS

The patient suffers from Tetralogy of Fallot. The history, physical findings, and electrocardiogram are supportive of this diagnosis. The echocardiogram demonstrates that the aorta "overrides" the ventricular septum. Note that the septum is not continuous with the anterior wall of the aorta, but ends midway at the ventricular level, below the aortic root. The space between the septum and the aorta represents the ventricular septal defect; since the aorta overrides both ventricules, desaturated right ventricular blood easily enters the systemic circulation. The angiogram demonstrated a severe obstruction at the right ventricular outflow tract, and right-to-left shunting through the ventricular septal defect.

The severe polycythemia results from hypoxemia, and the polycythemia, in turn, often results in bleeding. The mechanism is not always evident, but may relate to severe tissue hypoxemia, and to abnormalities in fibrinogen and other coagulation elements secondary to the polycythemia. Finally, hyperviscosity reduces tissue perfusion. Assuming that the bleeding is controlled, careful phlebotomy is indicated to reduce the hyperviscosity.

Other complications of hyperviscosity include central nervous system manifestations, such as confusion, or even intracerebral thrombosis and cerebral vascular accidents.

In addition to the complications of hyperviscosity, endocarditis is not uncommon in adults with Tetralogy of Fallot. Even more severe episodes of cyanosis may follow systemic hypotension, which potentiates the right-to-left shunt.

Total correction of Tetralogy of Fallot is possible with repair of the right ventricular outflow tract obstruction and patching of the ventricular septal defect. Symptomatic polycythemia with hyperviscosity, endocarditis, or any evidence of cardiac decompensation are indications for total surgical repair.

This gentleman underwent total surgical correction with excellent results, and complete correction of the polycythemia, hyperviscosity, and bleeding diathesis. Post-operatively, he is asymptomatic, and enjoying a normal, unlimited life.

PART 2, Urologic Neoplasia Series

Cytoreductive Surgery for Metastatic Testis Cancer: Considerations of Timing and Extent

JOHN P. DONOHUE, M.D.
LAWRENCE H. EINHORN, M.D.
STEPHEN D. WILLIAMS, M.D.
Indianapolis

OUR EXPERIENCE[1] and that of others[2,3] leads us to make certain observations regarding the timing and placement of surgery in the overall treatment program of metastatic testis cancer. Improvements in combination chemotherapy are so impressive that surgery has become adjunctive to the primary treatment goal of curative combination chemotherapy. In years past we felt surgical cytoreduction had to be the primary treatment modality, if feasible, followed by whatever adjunctive chemotherapy was available. We hoped to "diminish tumor burden," thereby rendering chemotherapy more effective. The basis for this was that chemotherapy was then non-specific. Only fractional cell kill with each treatment was accomplished. It stood to reason that the less the tumor burden the greater the cure because progressively smaller fractions of tumor persisted after each treatment with drug. To achieve total cell kill, tumor had to be greatly reduced and small in amount.

From the Departments of Urologic Surgery and Hematology Oncology, Indiana University School of Medicine.

Publication supported in part by VA and CRC Grant #M 01-RR00-750-06.

Today, however, we feel combination chemotherapy is the primary treatment modality in widely metastatic pulmonary and/or retroperitoneal disease. Surgery becomes adjunctive to the primary treatment, combination chemotherapy. This has evolved thanks to great advances in combination chemotherapy. The development of new chemotherapy programs have become progressively more effective.[4,5,6] Large volumes of tumor (non-seminomatous germinal cell tumors of the testis [hereafter, NSGTT]) will seemingly disappear after treatment with current combinations of these drugs, such as platinum, vinblastine and bleomycin.

Yet, impressive as this chemical cytoreduction may be, some patients will have evidence of persistent abdominal mass disease (about 15% of all Stage C patients treated here) after chemotherapy treatment. We and others[7,8] have found that about one-third of these patients with persistent masses after chemotherapy will have only fibrocystic elements in the resected tissue, another third will be reduced to mature teratomatous elements (still with malignant potential), and the remaining one-third will have persistent cancer in the contracted tumor specimen. Surgery is required for tissue definition and removal of possible persistent cancer. It also guides the chemotherapist in directing further chemotherapy. But surgery is rendered much more practical and technically feasible if massive or widespread disease is contracted to a single locus or a few smaller loci which are more readily resectable.

MATERIALS AND METHODS

Twenty-six patients with NSGTT presented with widespread pulmonary metastases and/or massive metastatic retroperitoneal tumor considered unresectable. They were referred to Indiana University Medical Center and admitted to the Hematology Oncology service for combination chemotherapy. They were treated with platinum, vinblastine and bleomycin combination chemotherapy in a dosage schedule reported by us earlier.[9,10] *(Table 1)*

Among the patients in *Table* 2 there were 23 who did not achieve NED status because of evidence of persistent abdominal disease. Three additional patients were referred here after combination chemotherapy elsewhere for their surgical

resections. All 26 had evidence of massive B_3/C disease prior to chemotherapy. All had some evidence of residual retroperitoneal tumor after chemotherapy (albeit greatly reduced in volume compared to pre-chemotherapy size) by CT scan or ultrasound. Only five of this group had continued positive serotesting at the time of their surgery, and all five had persistent cancer in tissue resected. (Interestingly, another four patients had persistent cancer in tissue resected but negative preoperative serotesting. Hence, of nine patients with cancer in the resected specimen, four had negative preoperative serotesting.)

Another nine patients in this group had teratoma in tissue resected. All had negative preoperative serotesting. The remaining eight patients had only fibrous or cystic tissue removed. Again, all had negative preoperative serotesting.

RESULTS

The fate of these patients is outlined in *Table* 3.

Four of nine persistent cancer patients are dead (one of pulmonary embolus three months postoperatively with no cancer at post mortem exam). Two have elevated serum markers and are in PR only on continued chemotherapy. The other three are currently living with no evidence of disease (NED) from one to five years.

All nine teratoma patients are living with NED status. But two of these relapsed with recurrent teratomatous tumors in lung and abdomen, which were resected by repeat laparotomy and thoracotomy. They were also treated with an additional chemotherapy (platinum, adriamycin and VP_{16}) protocol to be described in a future communication.

All eight fibrocystic patients have enjoyed a continuous CR and NED status. (They have been retrospectively classified as "pathologic CRs," as it were, because initial

TABLE 1

July 1974—September 1976
(50 Patients)

Platinum	20 mg/M² IV x 5 days every 3 weeks (3-4 courses)
Vinblastine	0.2 mg/Kg. IV x 2 every 3 weeks (4 courses)
Bleomycin	30 units IV push weekly x 12
Vinblastine	0.3 mg/Kg. monthly x 21 (maintenance therapy)

TABLE 2

Since September 1976
(77 Patients)

RANDOMIZE

- Platinum 20 mg/M² x 5 days q 3 wk (3-4 courses) Bleomycin 30 U IV weekly x 12 Vinblastine 0.4 mg/kg q 3 wk
- Platinum 20 mg/M² x 5 days q 3 wk (3-4 courses) Bleomycin 30 U IV weekly x 12 Vinblastine 0.3 mg/kg q 3 wk
- Platinum 20 mg/M² x 5 q 3 wk (3-4 courses) Bleomycin 30 U IV weekly x 12 Vinblastine 0.2 mg/kg q 3 wk Adriamycin 50 mg/M² q 3 wk

After completion of 12 wk of Bleomycin, maintenance therapy on all three arms to be Vinblastine 0.3 mg/kg monthly for 2 yr.

TABLE 3

Postoperative Status

No. Pts.	Histology	CCR	Relapse	Salvaged	Living PR	Living NED	Dead
9	Cancer	3	6	1	1	4	4
9	Teratoma	7	2	2		9	0
8	Fibrocystic	8	0			8	0

chemotherapy was curative and additional chemotherapy is no longer given to this group.)

DISCUSSION

Surgery alone in widely metastatic disease is clearly inadequate. Exceptional results with surgery alone, however, can be achieved with low level Stage B disease, as Staubitz demonstrated years ago.[11] Yet, an attrition rate due to metastatic activity in the remaining patients led us to the concept of adjunctive chemotherapy for treatment of occult systemic metastases. With only historical controls, survivorship has been shown improved in several series with use of adjunctive chemotherapy following surgery.[12,13] So, the marriage of surgery with adjunctive chemotherapy for NSGTT seems a natural one that provides good results in many centers.

But what is the role of surgery and chemotherapy in massive metastatic disease, Stage B_3 or C? Should surgery precede chemotherapy on the assumption that drugs will more likely produce longer complete remissions if tumor burden is reduced? Or, should surgery be withheld entirely, these patients considered inoperable for cure, and only chemotherapy given as treatment? Or, should the two be somehow combined? If so, what might be the best way to combine chemotherapy and surgery for massive metastatic NSGTT?

At first, it seemed cytoreductive surgery at the outset would be preferred for two reasons. Past clinical experience and laboratory experiments suggested chemotherapy is more effective when tumor mass is small.[14,15,16,17] Also, knowledge of cell kinetics in most chemotherapy studies suggests most drugs to be non-specific, providing only fractional cell kill with each drug dosage. Clearly then, the smaller the initial tumor burden, the less the residual tumor fraction would be after each drug administration. This dose-response principle underlies all of chemotherapeutics. The concept of initial cytoreduction, then, was very persuasive.

We and others[3,14] tried massive debulking initially. Our experience with primary debulking in three patients was indicative of problems that were to be noted by others.[3] Prolonged postoperative recoveries delayed onset of needed chemotherapy. Then, complications of chemotherapy in these compromised and catabolic patients created still further delays to completion of needed treatment. One patient succumbed to complications (GI hemorrhage secondary to stress ulcerations and pneumonia), the other two survived only after prolonged bouts of sepsis and GI and pulmonary problems. The morbidity with this approach seemed excessive.

Fortunately, at this time we were accumulating experience with more effective combination chemotherapy. The incidence of continuous complete remissions in patients with massive Stage C disease, treated with drugs alone (platinum, vinblastine, bleomycin [hereafter, PVB]), led us to believe such pharmacologic cytoreduction could be complete and lasting in some and provide significant and prolonged partial remissions in others. Newer understanding of cell kinetics permitted reconsideration of the role of primary surgical cytoreduction. "Cell cycle drugs" allowed much higher percentages of cell kill, apparently total at times. Vinblastine, a periwinkle derivative, is stathmokinetic. It is thought to produce metaphase arrest by its blocking of the enzyme RNA-tubulin polymerase. Also, bleomycin was found to be most effective when Chinese hamster cells were in metaphase.

It was reasonable, therefore, to combine these, as Samuels did, with a dramatic increase in complete response rate (CR) from 19% to 39%.[17] A recent abstract reports 53% CR with this combination.[18] We then had the good fortune to realize the efficacy of platinum in NSGTT early in this development. The results of adding platinum to vinblastine and bleomycin were quite impressive. The incidence of CRs with PVB were in the 60% to 70% range, as compared to 40% with VB. We then embarked on a program of primary chemotherapy for massive NSGTT, followed by secondary surgery for reduction of any residual masses, even if serum testing (alpha fetoprotein, beta HCG) was negative.

Our results with this group of 26 patients in PR after combination chemotherapy who had secondary cytoreductive surgery were most encouraging. Twenty-two (85%) of these selected patients survive and 20 (77%) are now in continuous complete remission (CCR with NED) from one to five years postoperatively. Another series using different preoperative drugs also produced encouragingly good results.[2,13] This suggested the principle of secondary cytoreduction was valid and effective. During this time another group reported their results using the alternative approach, namely primary surgical attack on disseminated disease followed by chemotherapy afterwards.[3] While some 50-odd% were reported as continuous complete remissions, in fact only 43% were living because three of the so-called continuous complete remissions were dead and found to have no cancer at autopsy. In contrast to this, 85% of our patients are living and well and 77%

resumed cured. It seemed apparent o us that survival advantage is estowed by initial combination hemotherapy followed by cytoreductive surgery.

This is not to suggest chemotherapy is so perfect that surgery an be obviated entirely. In fact, arly unpublished data from NIH uggests chemotherapy alone (VAB V) is found to be less effective han cytoreductive surgery and hemotherapy combined.[19,20] Unfortunately, that group, to this point, as not accumulated data regarding nitial combination chemotherapy ollowed by cytoreductive surgery s a secondary event. Hopefully when done, it will confirm our experience and that of Skinner.

It seems we cannot rely on current sero testing "markers" to indicate presence of persistent cancer after treatment. Of our nine patients with cancer in the resected tissue, our had negative markers preoperatively. Even in untreated cases here is a 38% to 15% false negative marker value preoperatively.[20,21]

Another consideration is the extent of cytoreductive surgery following chemotherapy. Should we biopsy only? Or, should we shell-out any lump and stop there? Or, should we resect tissue representative of the nodal drainage of the testis, in much the same manner as an RPLND for initial staging of Stage A or B disease?

In our experience with these 26 cases, we were able to recognize cystic changes grossly. But we were unable to identify, by any gross inspection technique, just what tissue had persistent cancer within it. It was found in association with solid fibrous, cystic or necrotic tissue. Hence, there seems no foolproof method of gross visual or tactile identification of what must still remain a microscopic diagnosis. Therefore, we recommend as complete RPLND in each case as feasible.

Recently Lange reported apparent accelerated growth of NSGTT after cytoreductive surgery.[22] Analysis of the eight cases reported, however, reveals that each of them had evidence of tumor growth activity at the time of surgical intervention. The first five cases were frank failures of chemotherapy, in partial remission, and showing evidence of exacerbation of tumor growth by increased sero testing tumor marker activity preoperatively. Surgery was done as a somewhat urgent measure to reduce tumor burden in a biologic system already proven refractory to chemotherapy. The last three cases were primary cytoreductive surgical cases who were salvaged by postoperative combination chemotherapy when they showed evidence of metastatic activity by sero testing three to four weeks postoperatively. In all eight cases surgical intervention was during active growth phase of either refractory (5) or fresh untreated (3) tumor. Continued metastatic activity in this setting should not be surprising. It would appear the natural history of the disease without surgery also.

The doubling time of NSGTT can be 24 hours. We often see chest metastases double in size in untreated patients in one week or two. Therefore, surgery can hardly be considered causative of this phenomenon of rapid tumor growth. Rather, the placement of surgery was antecedent to a quite natural growth development in those cases. Surgery can hardly be considered etiologic in altering tumor growth kinetics. But physical factors can contribute to metastases.

Turnbull[23] and Tyzzer[24] have shown both clinically and experimentally that tumor manipulation produces metastases. Conversely, "the no-touch isolation technique" can reduce metastases in some tumor systems.[26] Sadly, bulky retroperitoneal metastases must be manipulated, often with considerable effort, to achieve their removal. This seems to us still another reason to pre-treat these metastases before surgical manipulation is attempted. The fibrous, cystic, or teratomatous lesion should be less likely to metastasize with manipulation; even those with foci of cancer are often incased in extensive scar and local reaction, favoring local containment at surgery.

This early experience, then, suggests a reasonable current approach to the problem of massive metastatic B_3 or C NSGTT would be initial combination chemotherapy. We would suggest four courses of platinum, vinblastine and bleomycin followed by RPLND for optimal tissue diagnosis and direction of further therapy. If patients become NED by all criteria (CAT scan, serotesting, etc.), we prefer to follow the patients closely without RPLND.

A major area of controversy in urologic oncology is the patient who presents with Stage B_3 or C disease and achieves a complete remission with chemotherapy alone. A complete remission in this setting denotes normal HCG, alpha fetoprotein, lung tomography, and abdominal ultrasound and computed tomography. Several urologists feel that such patients should routinely be subjected to a retroperitoneal node dissection because of the possibility of persistent retroperitoneal disease. However, we do not feel a patient requires a retroperitoneal node dissection merely because he has not previously undergone a lymphadenectomy. Instead, we selectively reserve such surgery for those patients who have no evidence of pulmonary metastases but have radiographic or clinical evidence of persistent retroperitoneal

disease. Of our Stage B_3/C PVB treated CRs, (4) 14% relapsed and three of those were pulmonary within nine months of treatment. There was one late relapse at 17 months. Thus, our data clearly does not support the position of routine lymphadenectomies in regular Stage C disease (without B_3) if a chemotherapy-induced complete remission has been achieved.

Yet, the question of whether *all* patients with Stage C disease who become NED following combination chemotherapy require RPLND surgery remains unanswered. In the past we restricted this only to those with positive CT scans or abdominal ultrasound after treatment. But emerging information regarding positive tumor findings in those seemingly in CCR and NED concerns us.[26] Some groups are looking at this phenomenon with RPLND trials to better define the so-called CCR with NED following PVB chemotherapy for Stage C disease. At this point, however, we feel it is safe to say a survival advantage is conferred upon those with massive B_3 or C disease by the use of combination chemotherapy for initial pharmacologic cytoreduction followed by appropriate definitive surgery (RPLND and/or lobectomy) for further tissue diagnosis and therapy. This is particularly indicated in those with any evidence of residual tumor mass after PVB chemotherapy. We have elected to follow those with no evidence of cancer in the resected specimen with monthly chest x-rays and serotesting for beta HCG and alpha fetoprotein in year one postoperatively and bimonthly in year two postoperatively. Those with persistent malignant elements are further treated with combination chemotherapy. One of our "salvage protocols" includes the use of platinum, velban, adriamycin and the epipodophylline derivative (Vp_{16}). Even in this group, our experience noted earlier suggests we can hope to salvage as many as a third of these with continued or modified combination chemotherapy.

BIBLIOGRAPHY

1. Donohue JP, Einhorn LH, Perez JM: Improved management of non-seminomatous testis tumors. *Cancer,* 42: 3903-3908, 1978.
2. Skinner DG: Management of non-seminomatous tumors of the testis. Genitourinary Cancer. Skinner-de-Kernion, pp. 470-493, W. B. Saunders. 1978.
3. Merrin C, Takita H, Beckley S, Kassis J: Treatment of recurrent and widespread testicular tumors by radical reductive surgery and multiple sequential chemotherapy. *J Urol,* 117:291-295, 1977.
4. Samuels M, Howe CD: Vinblastine in the management of testicular cancer. *Cancer,* 25:1009, 1970.
5. Samuels ML, Holoye PY, Johnson DE: Bleomycin combination chemotherapy in the management of testicular neoplasia. *Cancer,* 36:318, 1975.
6. **Einhorn L, Donohue JP:** Improved chemotherapy for germinal testis tumors. *J Urol,* 117:65-69, 1976.
7. Merrin C, Takita H, Weber R, Wajasman Z, Baumgartner G, Murphy GP: Combination radical surgery and multiple sequential chemotherapy for the treatment of advanced carcinoma of the testis (Stage III). *Cancer,* 37: 20-29, 1976.
8. Comisarow RH, Grabstald H: Re-exploration for retroperitoneal lymph node metastases from testicular tumors: Report of 3 cases and review of literature. *J Urol,* 115:569, 1976.
9. Einhorn LH, Donohue JP: Chemotherapy for disseminated testicular cancer, *Urol Clin North Am,* 4:407, 1977.
10. Einhorn LH, Donohue JP: Combination chemotherapy in disseminated testicular cancer: the Indiana University experience. *Seminars in Oncology,* 6: 1, March 1979.
11. Staubitz WJ, Early KS, Magoss IV, Murphy GP: Surgical treatment of non-seminomatous germinal testis tumors. *Cancer,* 32:1206, 1973.
12. Staubitz WJ, Early KS, Magoss IV, Murphy GP: Surgical management of testis tumor. *J Urol,* 111:205, 1974.
13. Skinner DG: Non-seminomatous testis tumors: A plan of management based on 96 patients to improve survival in all stages by combined therapeutic modalities. *J Urol,* 115:65, 1976.
14. Johnson DE, Bracken RB, Ayala AG, *et al:* Retroperitoneal lymphadenectomy as adjunctive therapy in selected cases of advanced testicular carcinoma. *J Urol,* 116:66-68, 1976.
15. Skipper HE, Schabel FM Jr: Quantitative and cytokinetic studies in experimental tumor models. In: J. F. Holland and E. Frei (eds.) Cancer Medicine. Philadelphia: Lea & Febiger, 1973, p. 629.
16. Gutterman JU, Mavligit GM, Hersh EM: Chemoimmunotherapy of human solid tumors. *Med Clin North Am,* 60:441-462, 1976.
17. Sarna G: Principles of chemotherapy. Genitourinary Cancer: Ed. Skinner and deKernion. Saunders, W., 1978, pp. 14-33.
18. Samuels ML, Lanzotti VJ, Holoye PY, Howe CD: Stage III testicular cancer: Complete response by substage to velban plus continuous bleomycin infusion (VB-3). *Proc Amer Assoc Cancer Res,* 18:146, 1977.
19. Scardino P: Personal communication.
20. Javadpour N: The National Cancer Institute experience with testis cancer. *J Urol,* 120:651-659, December 1978.
21. Skinner DG, Scardino PT: Relevance of biochemical tumor markers and lymphadenectomy in management of non-seminomatous testis tumors: Current perspective. Submitted for publication, *J Urol,* March 1979.
22. Lange PH, Hekmat K, Bosl G, Kennedy BJ, Fraley EE: Accelerated growth of testicular cancer after cytoreductive surgery. Submitted for publication. *Cancer,* January 1979.
23. Fisher ER, Turnbull RB, Jr: The cytologic demonstration and significance of tumor cells in the mesenteric venous blood in patients with colorectal carcinoma. *Surg Gynecol Obstet,* 100:102-108, 1955.
24. Tyzzer EE: Factors in the production and growth of tumor metastases. *J Med Res,* 28:309-333, 1913.
25. Turnbull RB, Jr, Kyle K, Watson FR, Spratt, J: Cancer of the colon: The influence of the no-touch isolation technique on survival rates. *Ann Surg,* 166:420-427, 1967.
26. Richie J: Personal communication.

How to Say It

Terminal Illness Untimely Death Congenital Problem Handicap

DAVID F. WEHLAGE, M.D.
South Bend

PHYSICIANS accept as one of their major responsibilities the sk of communicating catastrophic nformation to individuals and roups. The personal turmoil that is enerated in a physician at those mes frequently leads to inept, inuman, and inconsiderate communiations. Our patients deserve the ame high level professionalism in andling the communication of atastrophic events as they receive n our technical management of isease and illness.

The setting is very important; hysicians are frequently not sensive enough about the setting and ircumstances of their communicaons. The basic principles of comunicating catastrophic informaion are the following:

1. An *unhurried approach* which an be projected by sitting down. Communicating while standing is sually inadequately received by individuals. The better the relationhip the communicator has with the ndividual, the better the communiation will be received.

2. A comfortable, quiet, private place to sit and talk is necessary. The corridors of hospitals or busy waiting rooms are inadequate surroundings for making sure the individuals hear what the physician has o say.

3. Leave some brief time for silence after the catastrophic information is communicated. Individuals need the physician's silent presence while they absorb the information and display their emotion.

4. Finish every session by saying: "Is there anything else I might answer now about which you have a question? If questions do arise later, please don't hesitate to ask me."

TELLING PATIENT ABOUT TERMINAL ILLNESS

Physician: "How sick do you feel you are?" The answer to that question gives the physician the knowledge that the patient already knows the seriousness of his illness or that he is denying all illness or does not really know (which is seldom).

Physician: "How much would you like to know about your illness?" Tell whatever the patient wants to know. Keep from battling the family about disclosure by telling them you will only tell the patient what he wants to know and that your responsibility is to relieve any uncertainty the patient may have.

Physician: "We have found a tumor (or a blockage of an artery, etc.) that cannot be totally removed (replaced, repaired). To try to prevent it from getting worse and causing you problems, we will be doing (explain medical treatment); and we would like for you to (explain what the patient can do). I am encouraged by (reveal positive things) which means you should be feeling relatively well for quite a while."

If patient asks: "How long do I have to live, Doctor?" or "Doctor, what is going to happen to me now?"

Physician: "I am not sure of that. I cannot predict the future in this way. I will be able to get you home feeling well, and you should have little pain or discomfort to bother you. Some people have felt well for as long as several years. With your consent and help, we can do (tell of medical regimen) which will give me some idea how well I think things will go. I want to follow your progress closely, and I will try to answer all your questions as they arise. I want to reassure you that I will try anything new that becomes available to treat your illness. It is important that you consider getting your personal affairs in order while you are feeling well. Would you like for me to talk to your family, or do you wish to try to help them understand your illness?"

This same format can be used to communicate to the family of the terminal patient. This format includes the elements of all further contacts with the terminal patient.

- Keep the future open and hopeful by reassuring an individual that research continues on his illness, that you will continue to be his physician, that you will make the future as pain free as possible, and that you will help the family reduce their suffering.
- Deal with daily occurrences, e.g., "How are the nurses treating you?" or "What did you do yesterday?"

The author, a clinical associate professor of psychiatry at Indiana University School of Medicine, maintains a private practice at 634 N. Lafayette Blvd., South Bend, Ind. 46601.

- Focus on what the patient *can* do and enjoy, not what he *cannot* do.
- Help the patient find alternatives for what he cannot do.
- Avoid long-term prophecies. Prophesize on small segments, e.g., "I am sure you will be able to go to work in three weeks," or "We found the tumor early."
- Remind the patient of his healthy, hopeful aspects and concentrate on treatable symptoms (like pain, anemia, etc.)

TELLING SPOUSE OF UNTIMELY DEATH

Physician: "I am here because there was an accident, a very bad accident. A car collided (or whatever the situation) with your husband's car, and he was injured very badly. He was brought here to the hospital right away, but he was hurt too seriously, and I must tell you that he did not survive."

This simple, brief, kind communication contains these elements:

- The unexpected, unforeseen nature of the event.
- The seriousness of the medical condition.
- The maximal use of appropriate medical care, and that suffering was minimal.
- The individual did not die alone.
- The word "survive" muffles without hiding the fact of death.
- The family will hear nothing after the announcement of death, so it should be the last thing communicated. Do not make preparatory statements too long.

When calling the family after a patient dies unexpectedly in the hospital:

Physician: "This is Dr.————. I am at the hospital with your husband. His condition has taken a sudden turn for the worse. Could you come here as soon as possible? I will meet you here."

When the family arrives, one can proceed to announce the death as mentioned above.

TELLING PARENTS ABOUT CONGENITAL PROBLEMS

Congenital problem for which there is no intervention:

Physician: Describe the developmental defect (failure of development of the brain, skull and so on; genetic imbalance in that the child has extra chromosome, etc.). Then say, "You must be well suited for carrying children to have carried a baby with this problem to full term. Having survived to be born was difficult for the baby, and his ability to survive is very limited. If we intervene to maintain survival, it will only temporarily help and will expose your baby to unnecessary procedures. We feel that the kindest approach is that we not use any extreme medical procedures. I would like for you to give me your permission for such an approach. Would you please consider it and let me know by tomorrow?"

Congenital problem which is treatable:

Physician: "Your baby is normal. There is a problem (describe problem, e.g., cleft palate, pyloric stenosis, etc.). A specialist (surgeon, etc.) will be able to repair this defect, and the results are usually (describe prognosis). The reason I stated that your baby is normal is that I believe the problem can be corrected and will not interfere with your child leading a normal life."

CHRONIC HANDICAP PROBLEM

The parents should be given facts relative to the cause of the problem, the usual range of functional limitations for the disorder, and what can be done to help the child adapt. It is important to help prepare the parents accept the child *with* his problem. It is very worthwhile to have the parents meet with other families who have the same type of problem and get involved with agencies that assist with the disorder (muscular dystrophy, cystic fibrosis, etc.)

TELLING PATIENT ABOUT UNCERTAINTY OF WHAT IS WRONG

Physician: "I am not sure what is wrong with you, but I have checked for (list serious illnesses) and have found all the tests normal. I have found (discuss positive tests) and cannot be sure what they mean. My previous experience and the experience of the specialists I talk to is that it is necessary and not serious to wait for (mention time) and re-examine you. My plans presently are to wait for (mention time) and see you every (mention interval) to observe whether you feel better or not. If during this time period you feel your health changing, please let my office know. I want you to (mention what patient can do) and take this medicine for (mention symptoms it is meant to relieve). Depending upon what *we* find out, *we* will make a decision whether I will continue to treat you or whether it would be advisable to see a consultant. At this point I do not feel that it is necessary unless you feel you wish to see someone else in consultation."

REFERRING TO A PSYCHIATRIST

Physician: "Have you ever considered seeing another professional for counseling?" Patients frequently will say they have wondered if they should and have waited for the physician to bring it up.

Physician: "My examination and

ne results of all the laboratory tests ndicate to me that a good portion f your problem is caused by emo- onal difficulties. I know from what ou have told me that you have een concerned about how you feel nd how you are coping. It is my xperience and the experience of a arge number of other physicians hat unclear emotional problems ause many aggravating and real hysical sensations. I would very nuch like for you to see a psychia- rist, who is a physician, and who is better trained to help you with hese concerns. I would like for you o contact Dr.————————for an appointment."

Do not use the statement, "It is ust your nerves." Do not exag- gerate the help a psychiatrist might give by telling the patient the psy- chiatrist will cure him. Likewise, using the statement, "It is my professional opinion . . .," gives the patient the message that he is not the only one you have seen with a similar problem, and it sounds more like the physician has a definite conviction about the referral. The patient may need to be reassured that he is not "crazy" if he asks.

ASKING FOR AUTOPSY

Physician: "As you know from having gone through John's illness with me, it is unclear exactly what happened and what really caused his death. I would like to have an examination done with your permission so that we all might know more definitely what happened. This examination is like the operations performed when people are alive, and frequently an operation after someone has died is just as important to help the family and me to really find out what happened. The information might help me know better what to do next time this same thing occurs. Sometimes the information can be used by family members to prevent the same thing from happening to them. The examination does not cause any serious problems for the funeral home, and it can be done as quickly as the forms you have to sign are complete. Could you give us the permission we need? I will share the results of the examination with you when I get them."

These examples can be modified to fit the individual physician's style and situation. I would invite anyone who feels they have what they consider a more adequate way to communicate particular catastrophic events to send them to me.



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS

Operated by PHYSICIANS

For the protection of PHYSICIANS

P&SLI

Physicians & Surgeons Liability Insurance Co., Inc.
800 Mac Arthur Boulevard / Munster, Indiana 46321
219 836-2288



Court Action

$350,000 Verdict Against Hospital For Negligence in Monitoring Birth

A $350,000 verdict in favor of a child who was born with cerebral palsy due to negligence in monitoring her mother's condition during childbirth was not inadequate, an Indiana appellate court ruled.

The mother entered the hospital in September 1968 for the birth of her thirteenth child. Her first twelve children had been born vaginally and without complications and none had any physical or mental impairment. She was prepped for delivery, examined and her bag of water was ruptured. Her amnionic fluid was clear but about two hours later her fluid was stained with meconium. About an hour later an intravenous drip of Pitocin was begun. The mother testified that during the next two hours no one monitored her contractions by placing a hand on her abdomen. Her hospital chart reflected no monitoring.

About an hour and a half after the Pitocin was started the mother experienced a sharp pain in her abdomen. Her uterus had ruptured and the child was expelled into the abdomen. The child's oxygen supply was compromised, and she suffered severe and permanent brain damage.

In the malpractice suit, the jury returned a $350,000 verdict against the hospital. The physician was found not negligent. The judge later entered judgment in favor of the hospital notwithstanding the jury's verdict and in favor of the physician.

Reinstating the jury verdict for the child, the appellate court said that the evidence presented jury questions on the negligence of the physician and the hospital. The jury's verdict should be affirmed. The $350,000 verdict was not inadequate, the court said.

Although the child's evidence showed that she suffered economic losses of $800,000, the jury was entitled to believe some of her witnesses and disbelieve others, the court said. The amount was not so small that it indicated passion, prejudice or impropriety, the court said.—*Long v. Johnson,* 381 N.E.2d 93 (Ind. Ct. of App., Oct. 5, 1978)

Courtesy of THE CITATION, Feb. 1, 1979.

Urinary Tract Infections in Childhood

CONTINUED FROM PAGES 573-576

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana University School of Medicine, Division of Postgraduate and Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46202.**

1. Urinary tract infections in childhood are
 a. common.
 b. rare.
 c. non-existent.
 d. none of the above.

2. In the first year of life, bacteriuria is most common in
 a. males.
 b. females.
 c. full-term infants of either sex.
 d. intrauterine growth-retarded infants.

3. In school-aged girls, urinary tract infections
 a. are less common than in boys.
 b. are never without symptoms.
 c. may resolve without treatment.
 d. are not associated with underlying anatomical abnormality.

4. In pre-school children, urinary tract infection is
 a. more common in males.
 b. commonly caused by staphylococci.
 c. unimportant.
 d. caused by organisms ascending the urethra.

5. Symptoms of urinary tract infection in the newborn include
 a. vomiting.
 b. jaundice.
 c. poor feeding.
 d. all of the above.

6. The diagnosis of urinary tract infection is confirmed by
 a. nitrate test.
 b. quantitative urine culture.
 c. urinalysis.
 d. intravenous pyelogram.

7. The number of colonies of bacteria in a urine culture that indicate infection are
 a. 10^3 col. per cc.
 b. 10^4 col. per cc.
 c. 10^5 col. per cc.
 d. 10^6 col. per cc.

8. Cystitis is most commonly treated with
 a. sulfisoxazole.
 b. nalidixic acid.
 c. cephalothin.
 d. gentamycin.

9. For an uncomplicated urinary tract infection, the usual duration of therapy is
 a. 3 days.
 b. 10 days.
 c. 21 days.
 d. 42 days.

10. An intravenous pyelogram and voiding cystourethrogram should be performed after the first urinary tract infection in all children under the age of
 a. 1 year.
 b. 3 years.
 c. 10 years.
 d. 16 years.

Answer sheet for Quiz: (Urinary Tract . . .)

1. a b c d	6. a b c d
2. a b c d	7. a b c d
3. a b c d	8. a b c d
4. a b c d	9. a b c d
5. a b c d	10. a b c d

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in the next issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before Sept. 10, 1979, to the address appearing at the top of this page.

BOOK REVIEWS



The Myth and Truth About Ginseng

Joseph P. Hou, Ph.D., pharmaceutical chemist and distinguished American scientist of Squibb Institute for Medical Research. Copyright 1978, A.S. Barnes and Co., Inc., Cranbury, N.J. 245 pages, 12 illustrations, $9.95.

There have been increasing contacts between the United States and the Orient in the past few years. Ginseng, respected as a miracle root in the Orient, is gaining increasing importance in the Western healing art. Today, ginseng is found in many preparations in a drug store and is periodically described in many publications. All those have left behind many unanswered questions and require additional scientific documentation. This book is a timely publication which is up-to-date, scientific and most complete. As the author has indicated in the preface, this book is to provide new evidence from scientific studies of ginseng, for answering frequently asked questions. The job has been well done.

The book has three parts and 12 chapters. The first four chapters describe the history and medical philosophy of ginseng in China, Korea, Japan, Siberia and Himalyas. The fifth chapter describes, in depth, the American ginseng. The following two chapters, under Part II, are devoted to the economic aspects of ginseng plant. The remaining five chapters provide up-to-date, scientific studies and answer the frequently asked questions. In addition to an Index there is a Glossary of Scientific Terminology in the book.

All chapters are easy to read. The illustrations, printing and paper are of superior quality. The paper cover, in full color for the ginseng plant, has made the book even more attractive. The price of the book is unusually reasonable.

I would like to recommend this most valuable book on ginseng very highly to the medical professions.

WEI-PING LOH, M.D.
Gary
Pathologist

Cardiovascular Physiology III, International Review of Physiology, Vol. 18

Edited by A. C. Guyton and D. B. Young. Copyright 1979, University Park Press, Baltimore. 368 pages, 75 illustrations, $24.95.

It is no use wishing that Starling's laws of the heart and capillary still apply—they don't, at least not with the same simplicity with which they were originally formulated. Documenting this and other complexity by critically sifting 1,160 references, this book dashes the hopes of those looking for one-line, take-home messages about what's new in circulatory physiology. Instead, the authors' central structuring conviction—that it is necessary to expose the weak points in all experimental techniques—shows us how to maintain a highly critical attitude toward the wealth of data at hand.

Three chapters about the microcirculation disagree whether interstitial pressure is subatmospheric, or whether transcapillary fluid exchange really occurs as Starling envisioned it. (It may do so in the brain capillaries but may not in the lung.) Nevertheless, each chapter presents an accurate and well written review that helps us penetrate to the frontiers of ultrastructural-functional correlation.

The five chapters updating the macrocirculation cover myocardial contraction and relaxation, systemic blood flow determinants, vascular capacitance, reflex circulatory control and cardiogenic hypertension. Clinicians who still think in terms of contractility, preload and afterload will find that physiologists have advanced far beyond these primitive concepts. Hence, this text is aimed at teachers and students of physiology. Clinicians will find it a challenging and disconcerting "review" of how much they don't know.

ALAN T. MARTY, M.D.
Evansville
Cardiovascular Surgeon

BOOK REVIEWS

Physician's Handbook

Marcus A. Krupp, M.D., et al. Copyright 1979, Lange Medical Publications, Los Altos, Calif. 94022. 725 pages, $9.

The 19th edition of PHYSICIAN'S HANDBOOK, like previous editions since its first appearance in 1941, is intended to aid physicians and members of the allied health sciences in practice and study. Like other Lange Medical Publications productions, revisions incorporating current knowledge appear frequently.

The six coauthors are all eminent west coast physicians. Condensing the essentials of medical knowledge into 725 pages represents a formidable undertaking. In accomplishing this mission, the authors have incorporated a considerable number of charts, tables, diagrams and line drawings. Even the end papers are utilized for useful tables and metric and English rules.

A few chapter titles indicate the scope of this pocket-sized volume:

- Emergency Medical Examination
- Electrocardiography
- Radiologic and Sonographic Examination
- Medical Parasitology
- Biologic Products for Prophylaxis and Therapy
- Medical Genetics
- Selected Diagnostic and Therapeutic Procedures

The text, though necessarily condensed, is of excellent quality. The flexible binding is sturdy. The compactness of the text suggests that it would be ideal for the practitioner's handbag. PHYSICIAN'S HANDBOOK can be enthusiastically recommended for members of the medical and allied professions desiring an authoritative, compact compendium.

W. D. SNIVELY, JR., M.D.
Internal Medicine
Evansville

Modern Cardiac Surgery

Edited by D. B. Longmore. Copyright 1978, University Park Press, Baltimore. 393 pages, 200 illustrations, $29.50.

This book compiles what was taught at the Eighth Annual Course on Cardiac Surgery, held in London in 1977. Of special interest to Indiana readers, computerized analysis of M-mode echocardiograms is now being emphasized in Britain. For example, computerized echo measurements of peak ventricular filling rates can provide an excellent index of mitral valve function. The surgical imposition of a rigid prosthesis into the mitral orifice is thus seen to put a considerable segment of ventricular muscle out of action. Mitral repair, rather than replacement, can present this echocardiographically assessed deterioration in function.

One half of the book is devoted to congenital heart disease. Here, as elsewhere, the authors alternate their attention between the growing edge of cardiac surgery and established cardiac surgical practice. Recoarctation following infant coarct repair is shown to be preventable if the subclavian angioplastic technique is used. Novel solutions for more difficult problems are also suggested. For instance, even if a distinct pulmonary artery is not depicted angiographically in patients with pulmonary atresia, meticulous surgical exploration of the lung hilum can result in the discovery of a vessel suitable for aorto pulmonary shunting.

"Myocardial protection"—the current euphemism for minimizing operative myocardial injury—is well covered, as are diverse subjects like complicated atrial septal defects, transplantation, transposition and prosthetic valves. Nuances, such as what really causes the abnormal superior EKG axis in A-V canal, are presented along with standard surgical techniques, complications and clinical results.

While Stinson, Shumway, Senning, Braimbridge, Rygg, Melrose, Brock, Cleland and 42 other cardiac-surgical celebrities have each contributed original essays, the book has been carefully edited. The result is a concise and readable teaching course that will appeal to all cardiovascular specialists.

ALAN T. MARTY, M.D.
Evansville
Cardiovascular Surgeon

When the indications surface...



NEOSPORIN® Ointment

(Polymyxin B-Bacitracin-Neomycin)

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically,* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa, primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically,* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

NEWS NOTES

Yearbook Addition

The portion of THE JOURNAL's 1979 yearbook entitled "Professional Medical and Allied Organizations" should have listed the Indiana Academy of Otolaryngology. Its president is Dr. Shokri Radpour of Kokomo and its secretary is Dr. Gerald C. Walthall of Indianapolis.

Diabetes Research Grants

The Juvenile Diabetes Foundation will accept applications until Oct. 1 for Career Development Awards and for Postdoctoral Fellowships in diabetes research. The awards and fellowships are for the 12-month period beginning July 1, 1980.

Complete information and application blanks may be obtained from the Foundation at 23 E. 26th St., New York, NY 10010. Tel: (212) 889-7575.

New PMA President

Lewis A. Engman, a 43-year-old Washington attorney and former chairman of the Federal Trade Commission, became president of the Pharmaceutical Manufacturers Association July 1, replacing C. Joseph Stetler, who retired after 14 years as head of PMA.

The PMA represents companies that make 90 to 95 per cent of the nation's prescription drug supply and a major percentage of the medical device and diagnostic products.

$3,000 Achievement Award

Dr. Nancy Roeske, professor of psychiatry at the I.U. School of Medicine, has received the 1979 Achievement Award of $3,000 from the American Association of University Women Educational Foundation. She was cited for her "achievements with the family-oriented approach to the mental health problems of children" as well as her "commitment to a humanistic approach to medicine, both as a psychiatrist to her patients and as an educator of health professionals."

Dr. Roeske, mother of two, is considered one of the leading national experts in mental health problems of visually handicapped children. She joined the faculty of the I.U. School of Medicine in 1964 and served as director of the Riley Child Guidance Clinic from then until 1973. She now is director of undergradute curriculum and coordinator of medical education in the Department of Psychiatry.

Indiana M.D. Fees Are Lowest

An analysis by Blue Shield of Indiana of federal figures on physicians' fees charged to Medicare shows that Indiana charges are lowest on four of 11 common procedures studied, second lowest on four, and third lowest on two, when compared to their counterparts in surrounding states (Illinois, Michigan, Ohio and Kentucky).

Hoosier fees were found to be lowest for routine hospital visits ($10.26 vs. a five-state average of $11.23), radical mastectomy ($539.26 vs. $585.12), pacemaker insertions ($642.30 vs. $781.12) and appendectomy ($294.02 vs $312.11). Second lowest fees were for complete blood counts, hysterectomies, cholesterol laboratory tests and blood sugar tests. Third were initial limited office visits and cataract operations.

The figures will be used to play an important role in disputes with the FTC and Indiana's Department of Insurance over charges of physician dominance of Blue Shield's governing board, which the FTC proposes to change to a consumer-oriented board. Currently, 25 board members are physicians.

The analysis showed, however, that in two states with consumer-oriented boards (Illinois and Michigan) fees tended to be higher than in Indiana, a fact that will be used to defend the position that doctors tend to be tougher on doctors than lay people are.

Here and There . . .

. . .*Dr. John W. Beeler* of Indianapolis has been reelected secretary of the Board of Directors, Blue Shield of Indiana.

. . .*Dr. John L. Glover* of Indianapolis has been elected president of the Indiana Chapter of the American College of Surgeons.

. . .*Dr. T. Forrest Fisher* of Valparaiso, plant surgeon and medical director at U.S. Steel's Gary Works, has been named director, Safety and Environmental Health for the U.S. Steel Corp. He assumed his new duties at the corporation's Pittsburgh headquarters last month.

. . .*Dr. Melvin L. Faw* of Evansville has been elected president of the Welborn Hospital medical staff. *Dr. John C. Huus* was elected secretary-treasurer.

. . .The vascular laboratory of St. Vincent Hospital in Indianapolis has been named to honor *Dr. Geothe Link,* who marked his 100th birthday May 20. Dr. Link is retired from the hospital's medical staff.



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique that we have over $4,000,000.00 in personal loans made to Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Colin G. Hoza
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis **Morris Plan**

Tenuate® ⓒ
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION
Brief Summary
INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence.* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.
PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633
Direct Medical Inquiries to:
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

Merrell

B-3921 (Y587A)

Overweight may not always be simple... complications can develop*.

Complicated or not...

Tenuate® Dospan® ℂ℣
(diethylpropion hydrochloride NF)
75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

Merrell

For prescribing information see opposite page.

new
600 mg tablets
Motrin®
ibuprofen, Upjohn



More convenient for some of your patients.

Now there are three Motrin tablet strengths to choose from–
600 mg, 400 mg, and 300 mg

Upjohn The Upjohn Company
Kalamazoo, Michigan 49001, U.S.A.
© 1979 The Upjohn Company

NEWS NOTES

Ritchey Awards Presented

1979 Ritchey Recognition Day awards were presented to three Indianapolis physicians during the 9th annual J.O. Ritchey Lecture series at Methodist Hospital in June.

Receiving the awards, based on significant contributions in the field of internal medicine, were Dr. Bernard Rosenak, Dr. Donald E. Wood and Dr. A. Ebner Blatt.

The lecture series honors Dr. James O. Ritchey's national influence as a skilled physician, diagnostician and teacher. A past president of Methodist Hospital's medical staff, he holds the record for longest continuous practice at Methodist.

Physician Shortage Being Solved

More than half of the current graduates of residency programs around the state are choosing smaller cities in which to set up practice, according to Dr. Alan Fischer, chairman of the I.U. School of Medicine's Department of Family Medicine.

The change—to cities with populations of less than 10,000—is attributed in part to the Medical Distribution Loan Fund, established four years ago by the Indiana Legislature to get more doctors into rural areas and inner cities. Under the program, students receive money that is to be paid back year-for-year by service in primary care where a physician shortage exists.

Respiratory Hospital to Honor Mrs. Bowen

National Humanitarian Award

Elizabeth Bowen, wife of Governor Otis R. Bowen, M.D., will be honored Aug. 30 for her distinguished community service at a benefit dinner on behalf of the National Jewish Hospital/National Asthma Center (NJH/NAC).

At the dinner, to be held at the Indianapolis Hyatt Regency, Mrs. Bowen will receive the NJH/NAC National Humanitarian Award, which is presented in Indianapolis and other key cities to honor a select group of Americans who have demonstrated great humanitarian concern and outstanding community service.

Mrs. Bowen, a former president of the ISMA Auxiliary, has been Indiana's First Lady since 1972 and has been actively interested in various community affairs for several years.

She is a member of the Governors of Riley Memorial Hospital Association and of the national advisory committee on child abuse and neglect, Education Commission of the States.

In 1978, Mrs. Bowen was selected as Indiana Mother of the Year, and she also was awarded an honorary Doctor of Humanities degree by Vincennes University. The Bowens have children in Lawrenceburg, Muncie, Indianapolis and Bellevue, Wash.

Proceeds from this month's benefit dinner will help pay for patient care and research at NJH/NAC. Located in Denver, the medical center is the nation's leading institution for the study and treatment of a wide range of chronic respiratory diseases and immune system disorders.

The hospital cares for persons from throughout the U.S. without regard to age, race, religion or ability to pay. Over the years, NJH/NAC has provided more than 82,000 days of care to Indiana residents.



BETH BOWEN cuddles 5-month-old Alfonzo Crespin at the National Jewish Hospital/National Asthma Center in Denver. The child is an asthmatic being treated at the renowned medical center.

NEWS NOTES

Jail Project to Continue

The AMA has been awarded a nearly $1.3 million contract by the Law Enforcement Assistance Administration of the Department of Justice to continue implementing AMA health care standards in jails.

Indiana, one of 16 pilot project states, leads the nation with seven of the total 35 currently accredited jails and will receive $46,000 of the contract. Certified Indiana county jails include those in LaPorte, St. Joseph, Allen, Marion, Monroe, Greene and Vanderburgh counties.

Paramedic Motorcycles

The Northfield, Illinois, Rescue Squad has organized two paramedic motorcycle units for highway work. Originally outfitted for emergency calls on an expressway under reconstruction, the cycles were found to be adaptable to poor road and difficult traffic conditions. Together, the cycles carry a basic trauma kit, a rescue tool kit, an airways kit, an air bag kit and a fire suppression kit. They have radio contact with the hospital at all times. The equipment was provided by a grant from Allstate Insurance Company Foundation.

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

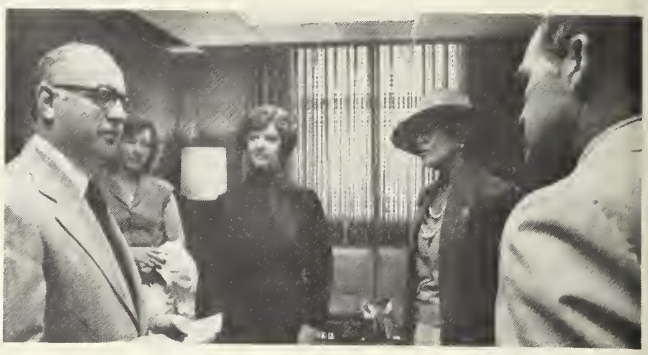
Immediate delivery on many 1979 models

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594



Dr. Steven C. Beering (left), dean of the I.U. School of Medicine, discusses AMA-ERF with Donald F. Foy, ISMA executive director, after receiving a check for the Education and Research Foundation's loan program from the ISMA Auxiliary, represented by (from left) Mrs. Lois Golden, former state AMA-ERF chairman, Mrs. Ruth Gattman, immediate past president, and Mrs. Charlotte Bennett, president.

PHOTO BY BARBARA LAUTER

The 'Hidden System' of Primary Medical Care

A survey by the Robert Wood Johnson Foundation shows that the shortage of physicians who provide general medical care will be over by the late 1980s. Previous estimates predicted that the shortage would persist into the 1990s despite a rapid growth in the size of medical school classes.

Dr. David E. Rogers, president of the Foundation, reports in the NEW ENGLAND JOURNAL OF MEDICINE that careful study of the primary medical care system reveals a "hidden system." Specialists such as internists, cardiologists and obstetricians/gynecologists provide one of five Americans with general care. The percentage of specialist encounters with patients for whom the specialist is the principal source of care added up to: internists, 62%; obstetrician/gynecologists, 65%; and cardiologists, 58%.

Indiana Malpractice Claims

Since P.L. 146 was passed in 1975, the Indiana Department of Insurance reports that 545 malpractice claims have been filed in the state.

Claims filed by year were one in 1975, 20 in 1976, 151 in 1977, 258 in 1978, and 115 so far this year (as of June). Of those, 209 have requested a screening panel while 220 have not; 119 have not completed selection of a panel; 41 cases have not complied with P.L. 146; 61 were settled before selection of a panel; 39 have selected all four panel members; 33 have rendered a decision; and only eight have found defendant negligence.

NEWS NOTES

'Medical Journal' on the Air

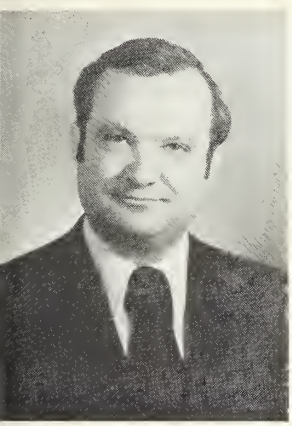
A series on the latest developments in medicine and health is being aired on 180 radio stations, including at least five in Indiana.

"Medical Journal" is a series of 90-second spots being broadcast weekdays in prime time slots. The series is a joint effort of Columbia-Presbyterian Medical Center in New York City and the Prudential Insurance Company.

The series, featuring taped interviews with medical and research authorities, is currently being aired over WJOB in Gary-Hammond, WHME-FM in South Bend, WVTS in Terre Haute, and WGOM and WHRI-FM in Marion. At press time, attempts were being made to secure air time in the Indianapolis and Fort Wayne areas.

Gary Physician Visiting China

Dr. Wei-Ping Loh of Gary is in China this month as the leader of a 10-man group of U.S. physicians who are visiting medical institutions in Canton, Shanghai and Peking. He led a group of physicians from the Texas Medical Association on a similar trip to Egypt in April.



Health Commissioner Appointed

Dr. Blankenbaker

Dr. Ronald G. Blankenbaker, 38, a Rensselaer native who has been chairman and professor of the Department of Family Medicine at the University of South Florida Medical College since 1977, will become Indiana's new health commissioner Oct. 1.

Dr. Blankenbaker will replace Dr. William T. Paynter, who resigned earlier this year. (See THE JOURNAL, 72:2, 134, February 1979.)

A 1968 graduate of the Indiana University School of Medicine, he completed his residency at Methodist Hospital. He then practiced family medicine and taught at the I.U. medical school for several years.

Dr. Blankenbaker's term will be concurrent with that of Governor Otis R. Bowen, M.D., expiring in January 1981.



ISMA Convention Theme

Dr. Spain
Program Coordinator

"Medicine in the Nuclear Age" is the topic for the general scientific session of the ISMA annual convention, to be held in Indianapolis Oct. 15.

The program is being coordinated by Dr. W. Thomas Spain of Evansville. It will feature Dr. Larry W. Gibbons of the Cooper Clinic in Dallas discussing "How Fit Is Fit;" Dr. Jack Hall of Indianapolis' Methodist Hospital, "Do You Have Any Risks;" Dr. Bernard E. Oppenheim of I.U.'s Division of Nuclear Medicine, "How Dangerous Is Low-Level Radiation;" and Dr. Edward A. Patrick of Purdue's Institute of Engineering and Medicine and Dr. James Fattu of St. Mary's Medical Center in Evansville, "Assisted Computerized Diagnosis."

NEW PROSTHETIC METHODS OPEN NEW DOORS

New doors have been opened to amputees — thanks to new prosthetic techniques. During the past few years many recent prosthetic developments now offer improved function for the amputee, as well as better appearance and increased comfort.

SILASTIC SILICONE MATERIAL - Silastic is useful in forming distal-bearing or total-contact pads that apply form-fitted pressure on the distal end of stumps. The density of this material may be varied to suit the individual requirements of each amputee.

TOTAL CONTACT SOCKET - Developed by research, this new socket distributes weight bearing over the entire stump. It is particularly helpful in problem cases of poor circulation.

MOLDED SACH FOOT - This Solid-Ankle, Cushion-Heel foot is more durable and its one-piece construction is more pleasing in appearance.

MUENSTER FITTING - Better control with less harness is achieved in this new method of fitting very short—below elbow stumps. The unusual socket shape utilized provides a more intimate fit assuring a more functional prosthesis.

For information on these developments, please write to:

Hanger PROSTHESES

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807

PHYSICIANS' DIRECTORY

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

CARDIOLOGY

WILLIAM K. NASSER, M.D.
MICHAEL L. SMITH, M.D.
CASS A. PINKERTON, M.D.

are pleased to announce the addition of

JAMES W. VAN TASSEL, M.D.

for the practice of cardiology and cardiac catheterization

8402 Harcourt Road, Room 413 **Indianapolis 46260**
St. Vincent's Professional Building **(317) 257-9316**

Physician Referral Only

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurological Surgery

1815 North Capitol Avenue Indianapolis 46202

CLINICAL, ANATOMIC PATHOLOGY

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY
5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Training for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

INTERNAL MEDICINE

THE MEDICAL LABORATORY
OF
DRS. THORNTON, HAYMOND, COSTIN, BUEHL, BOLINGER & WARNER
301 EAST 38th ST.
INDIANAPOLIS, INDIANA 46205
Phone: (317) 925-6466

Complete Laboratory Services

H. C. Thornton, M.D. (1902-1978)
J. L. Haymond, M.D., F.C.A.P.
R. L. Costin, M.D., F.C.A.P.
I. A. Buehl, M.D., F.C.A.P.
G. L. Bolinger, M.D., F.C.A.P.
T. M. Warner, M.D., F.C.A.P.
F. D. McGovern, Jr., M.D., F.C.A.P.
R. O. McClure, M.D., F.C.A.P.
R. P. Hooker, M.D., F.C.A.P.

- MICROBIOLOGY
- SEROLOGY
- CHEMISTRY
- SURGICAL PATHOLOGY
- HEMATOLOGY
- COAGULATION
- FORENSIC
- CYTOLOGY
- EKG
- VETERINARY PATHOLOGY
- TOXICOLOGY
- HOUSE CALL PHLEBOTOMY
- COURIER SERVICES

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Ahearn, M.D. **William H. Dick, M.D., FACP**
Thomas Wm. Alley, M.D., FACP **Theodore F. Hegeman, M.D.**
George W. Applegate, M.D. **Douglas F. Johnstone, M.D.**
Charles B. Carter, M.D. **LeRoy H. King, Jr., M.D., FACP**

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capitol, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

PHYSICIANS' DIRECTORY

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
THOMAS L. McCONNELL, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

DAVID L. PHILLIPS, M.D.
JOHN J. SAALWAECHTER, M.D.
BEN H. PARK, M.D.
RITCHIE COONS, M.D.
Individualized Treatment for Alcoholism

KOALA CENTER



1711 Lafayette Avenue
Lebanon, Indiana 46052

(317) 482-3711

HAND SURGERY

By appointment **Phone 317-783-1319**
VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.
Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery
3530 S. Keystone, Suite 305 **Indianapolis 46227**

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.
Certified: American Board of Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons
Specializing in Colon and Rectal Surgery
214 Sherland Building
105 East Jefferson Blvd. South Bend, Ind. 46601

PSYCHIATRY

GORDON T. BROWN, M.D.
Diplomate, American Board of Psychiatry and Neurology
Adult and Adolescent
Psychotherapy, Consultation, Evaluation
Tel: (317) 923-3269
3266 North Meridian Street Indianapolis 46208

OPHTHALMIC PLASTIC SURGERY

Robert D. Deitch, M.D., F.A.C.S.

Fellow of the American Association of
Ophthalmic Plastic and Reconstructive Surgery

St. Francis Medical Arts Building
1500 Albany Street Suite 801
Beech Grove, Indiana 46107

PHONE ANSWERED 24 HOURS (317) 783-6187

OBITUARIES

Daniel G. Bernoske, M.D.

Dr. Bernoske, 73, a retired Indianapolis physician, died June 20 at Community Hospital.

A 1929 graduate of the Indiana University School of Medicine, he retired in 1972.

Dr. Bernoske was a former director of the Bureau of Preventive Medicine, State Board of Health. He had been in private practice in Michigan City from 1931 to 1957. He became Lake County health commissioner in 1958 and joined the state health board in 1966 as an epidemiologist. He remained with the agency until he retired.

He was a fellow of the American Public Health Association and a member of the Indiana Public Health Association and the American Association of Public Health Physicians.

Ramon B. DuBois, M.D.

Dr. DuBois, 68, a Lafayette physician since 1945, died June 12 at St. Elizabeth Hospital, Lafayette.

He was a 1937 graduate of the Indiana University School of Medicine and was a World War II Army veteran.

Dr. DuBois had been an active member of the ISMA and was a former president of the Tippecanoe County Medical Society. He also was a former president of St. Elizabeth Hospital's medical staff, and a former Tippecanoe County coroner.

He was a member of the American Association of Physicians and Surgeons, the Indiana Academy of Family Practice and the National Academy of Family Practice.

Norman E. Forsee, M.D.

Dr. Forsee, 60, a Jeffersonville physician, died June 3 at Methodist Evangelical Hospital, Louisville.

He was a 1944 graduate of the University of Louisville Medical School. He was a Navy veteran of World War II.

Dr. Forsee, a former president of the Clark County Medical Society, was a member of the American Academy of Family Physicians, the Association of American Physicians and Surgeons, the American Professional Practice Association and the American Academy of Family Practice.

R. Milton May, M.D.

Dr. May, 78, a retired Laconia physician, died June 3 at Jewish Hospital, Louisville.

He was a 1935 graduate of the Indiana University School of Medicine.

Until his retirement in 1965, he had been assistant chief surgeon of the U.S. Steel plant in Gary. He then returned to his birthplace, Laconia, and had a country practice until 1977.

Dr. May became a senior member of the ISMA in 1971.

Simon S. Rubin, M.D.

Dr. Rubin, 70, a Merrillville allergist, died June 19 at Broadway Methodist Hospital, Merrillville.

He was a 1934 graduate of Northwestern University School of Medicine. He served in the Army during World War II.

Dr. Rubin had practiced in Gary until 1972, when he moved to Merrillville.

He was a fellow of the American Academy of Allergy and was a member of the International Academy of Medicine and the Chicago Allergy Society.

Indiana Medical Foundation

The Indiana Medical Foundation was organized to furnish support for the educational activities of the Indiana State Medical Association. These activities include programs for continuing education and the scientific publications of **The Journal.** Contributions made to the foundation are deductible by donors in accordance with the Internal Revenue Code. Bequests, legacies and gifts are deductible for federal estate and gift tax purposes. Memorial contributions made to the foundation will be formally recorded and acknowledgment will be sent to the family. Gifts, bequests, and memorial contributions may be mailed to the foundation at 3935 N. Meridian St., Indianapolis 46208.

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

OPPORTUNITIES FOR PSYCHIATRISTS—There are current openings among the Indiana State Hospitals at some locations in the state for psychiatrists of most experience levels; including the opening as Assistant-Superintendent, Medical at Logansport State Hospital. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and normal on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, KY 42071 or call (collect) 502-753-9772. Forrest is retained by the Indiana Department of Mental Health.

Professional office space available in ideal west side Indianapolis Chapel Hill Professional Complex. 1240-3000 square feet. For information, call Mark Genung, (317) 271-1000.

FOR SALE—I am retiring from General Practice and wish to sell my office, equipment and furniture, all in good condition. Contact W. M. Barton, M.D., 316 E. Main St., Centerville, Ind. 47330. Tel: (317) 855-5123.

Indy Plasma Center, 38th & Illinois, Indianapolis, Ind., is looking for a retired licensed physician as Medical Director for their blood plasma collection center. Duties involve physicals on prospective donors, emergency care and supervision of medical procedures. Hours are AM only and five days per week. If interested, call Mrs. B. Novak at 317-924-6336.

INDIANAPOLIS, Ind.—Westside property ideal for doctor's office. Four-bedroom house and 16 acres. Buy as little or as much as you need, or construct your own office. SAVAGE/ landrigan, Inc. Tel: (317) 844-7291. (B-35)

PHYSICIAN WANTED—Opportunity exists for young family practitioner to set up office in new medical complex, westside Indianapolis, 38th St. ot I-465. My office presently has oversized waiting room and business office allowing for second office on opposite side and shoring of overhead expenses. Call 317-247-0300, 8:30-4:30 except Wednesday and Saturday until noon only.

LOCUM TENENS—EMERGENCY MEDICINE—available in our 100 hospitals; monthly scheduling is flexible and according to your preferences; malpractice is paid, excellent hourly income according to your flexibility and hours worked. Call toll free 1-800-325-3982, ext. 220 for details.

MICHIGAN CITY, INDIANA—Emergency Department Director; flexible scheduling. Excellent income—$57,000 to $65,000. Paid malpractice insurance. Contact T.P. Cooper, M.D., 970 Executive Parkway, St. Louis, Missouri 63141, or call toll free 1-800-325-3982.

INFORMATION WANTED: The Indiana Historical Society is conducting a project to locate and record archives and manuscripts in Indiana. This includes: 1. Personal correspondence between two or more individuals or between individuals and organizations. 2. Personal diaries and journals. 3. Records (account books, minutes, reports, correspondence) of businesses, organizations, associations, clubs, churches and similar groups. Anyone wishing to record such items is asked to contact Donald E. Thompson, Wabash College, Crawfordsville, Ind. 47933.

The Indiana Historical Society is gathering information for a third volume of Indiana authors. It will include the years 1967 through 1979 (or 1980) and the names of all those omitted from the first two volumes. To be eligible one must have been born in Indiana or lived in the state for a number of years, and must also have written a pamphlet or book. Contact Donald E. Thompson, Wabash College, Crawfordsville, Ind. 47933.



"Efficiency is the key to your practice"

Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE

6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

Are You Moving?

If so, please send change of address to Membership Dept., ISMA, 3935 N. Meridian St., Indianapolis, IN 46208, at least six weeks before you move.

Name _____

Address _____

City _____ State _____ Zip _____

County _____

IMPORTANT — Attach mailing label from your last Journal here.

ADVERTISERS IN THIS ISSUE

August 1979 Vol. 72 No. 8

American Fletcher National Bank 549
Beltone Electronics Corp. 555
Blue Cross-Blue Shield 547
Brown Pharmaceutical Co., Inc. 585
Burroughs Wellcome Co. 600
Commercial Announcements 611
Eli Lilly and Company 569
Giganti, Inc. 565
Hanger Protheses 607
Immke Circle Leasing, Inc. 606
Indiana Medical Bureau 572
McClain Car Leasing, Inc. 580
Mead Johnson Pharmaceutical Division 551, 552
Medical Protective Company 556
Merck Sharpe & Dohme 596
Merrell-National, Inc. ..562, 563, 564, 602, 603
Morris Plan 602
P&SLI 595
Pharmaceutical Manufacturers Assn. ..558, 559
Physicians' Directory 608, 609
Professional Capital Corp. 545
Professional Careers Institute 612
Roche Laboratories Covers
Smith, Kline & French 561
S-Tek Computer Services, Inc. 564
Upjohn Company 604

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

September 1979 • Vol. 72 • No. 9

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

1979 CONVENTION THEME:

"Medicine in the Nuclear Age"



IN MEMORY OF

James A. Harshman, M.D.

1930 - 1978

Anatomic, Clinical Pathologist · St. Joseph Memorial Hospital, Kokomo

♦

136th PRESIDENT

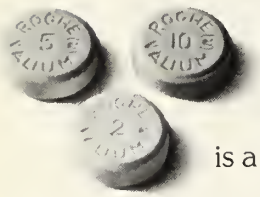
Indiana State Medical Association

U of California, San Francisco
The Library, Acquisitions Dept.
SAN FRANCISCO, CA 94143

LIBRARY
U.C. SAN FRANCISCO

OCT 12 1979

A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own. Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium® (IV)
diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

a prudent choice in psychic tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed, adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

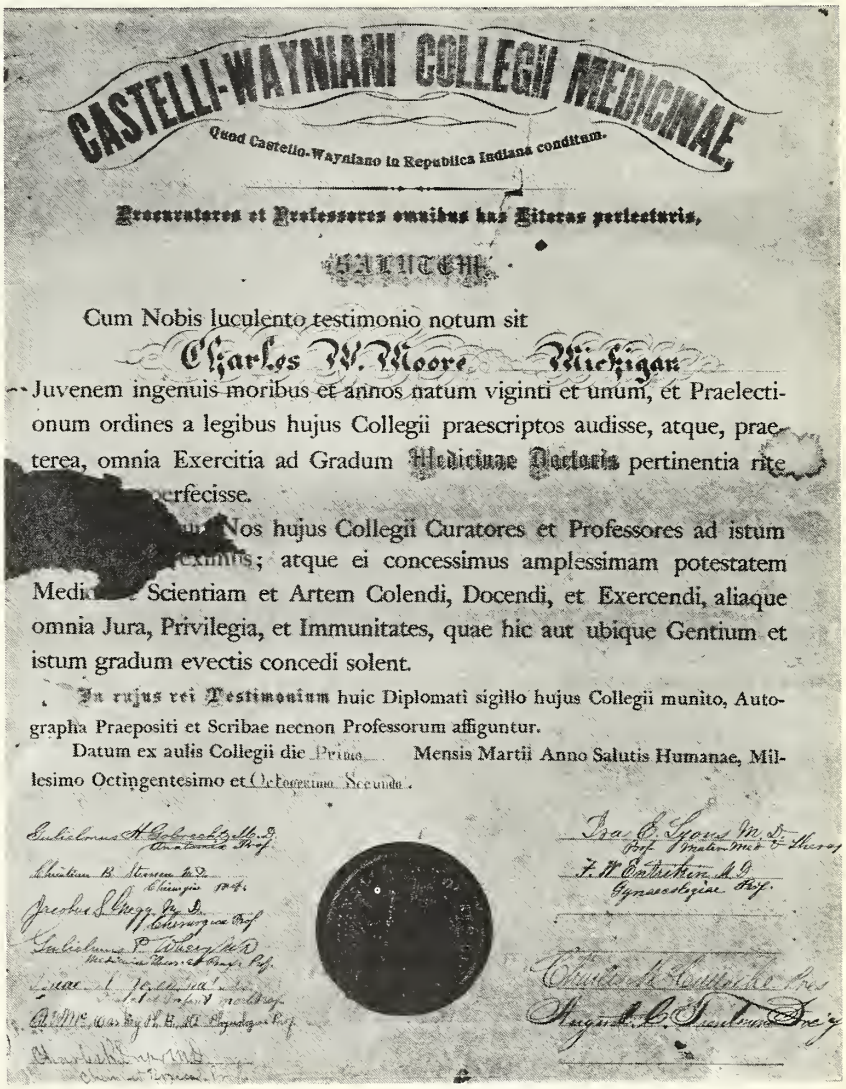
ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis

Wanted: Historical Medical School Diplomas



CASTELLI-WAYNIANI COLLEGII MEDICINAE

Quod Castello-Wayniano in Republica Indiana conditum.

Procuratores et Professores omnibus has Literas perlecturis,

SALUTEM.

Cum Nobis luculento testimonio notum sit

Charles W. Moore Michigan

Juvenem ingenuis moribus et annos natum viginti et unum, et Praelectionum ordines a legibus hujus Collegii praescriptos audisse, atque, praeterea, omnia Exercitia ad Gradum Medicinae Doctoris pertinentia rite perfecisse.

Nos hujus Collegii Curatores et Professores ad istum eximus; atque ei concessimus amplessimam potestatem Medi Scientiam et Artem Colendi, Docendi, et Exercendi, aliaque omnia Jura, Privilegia, et Immunitates, quae hic aut ubique Gentium et istum gradum evectis concedi solent.

In rujus rei Testimonium huic Diplomati sigillo hujus Collegii munito, Autographa Praepositi et Scribae necnon Professorum affiguntur.

Datum ex aulis Collegii die Primo Mensis Martii Anno Salutis Humanae, Millesimo Octingentesimo et Octogesimo Secundo.

Illustrating this article is a photograph of a photographic copy of a diploma of the Medical College of Fort Wayne. The Medical College of Fort Wayne was organized in 1876. In 1879, as a result of faculty dissention, a second school was formed, the Fort Wayne College of Medicine. The first school went out of existence in 1883. The second school continued on into the 20th century and joined with the two Indianapolis schools to form a medical school for the State of Indiana.

The amphitheater of the Old Pathology Building is being used to illustrate this history of medical education in Indiana. This work has proceeded satisfactorily with reference to paintings of the various schools and portraits of the various educators of the various schools. **In terms of diplomas, however, we are not doing as well.** For example, we do not have diplomas from either of the schools at Fort Wayne, nor do we have diplomas from the medical schools that existed at Evansville. The photograph on this page is as close as we have come so far.

Illustrated here is a photographic reproduction of the diploma of Dr. Charles W. Moore, who received this M.D. degree from the Medical College of Fort Wayne in 1879. This photographic copy was provided by descendants of Dr. Moore, two of his great-granddaughters. One of these, Mrs. Donald H. Heiss, a missionary who was with her missionary husband in Amori, Japan in April 1978, received a copy of the *Indiana Medical History Quarterly*, which described the Fort Wayne schools. She wrote concerning her grandfather and told of this diploma, which is in her sister's possession. The sister, Mrs. Allen Saupe of Dearborn County, provided the photographic copy. The original, which is in need of restoration, is to become the property of Mrs. Heiss' son, Dr. John Heiss, who is doing a family practice residency in Tennessee.

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Vol. 72, No. 9
SEPTEMBER 1979

USPS 284-440
ISSN 0019-6770

Editorial & Advertising Office:
3935 N. Meridian St.,
Indianapolis, Ind. 46208

EDITOR
Frank B. Ramsey, M.D.
MANAGING EDITOR
Martin T. Badger
BUSINESS MANAGER
Donald F. Foy

CONSULTING EDITORS
Charles A. Bonsett, M.D.
A. W. Cavins, M.D.
Samuel R. Mercer, M.D.
Lall G. Montgomery, M.D.
W. D. Snively, M.D.
I. W. Wilkens, M.D.

EDITORIAL BOARD
Elton Heaton, M.D.
Rodney A. Mannion, M.D.
(Terms expire Dec. 31, 1979)
Alvin J. Haley, M.D.
Wei-Ping Loh, M.D.
(Terms expire Dec. 31, 1980)
Steven C. Beering, M.D.
Paul S. Rhoads, M.D.
(Terms expire Dec. 31, 1981)

THE JOURNAL of the Indiana State Medical Association is published monthly in the interests of the medical profession of Indiana. No copyright claimed. Copyright rests solely with authors, who are responsible for statements made in their articles. Views expressed do not necessarily reflect the opinions of the editors. Scientific and editorial contributions are accepted for exclusive publication, subject to editorial requirements.

All issues since 1967 available on microfilm from University Microfilms, Inc., 300 N. Zeeb Rd., Ann Arbor, Mich. 48106. Indexed in Index Medicus and Hospital Literature Index.

Advertising rates and data available on request. Representative for national advertising: State Medical Journal Advertising Bureau, Inc., 711 South Blvd., Oak Park, Ill. 60302.

Publication deadline: 1st day of month preceding month of issue.

Subscriptions: $14 per year, USA; $16, Canada; $17, foreign; $12, libraries; $10, senior ISMA members; $8, members; except for special issues, single copies not available. Subscriptions renewable only in January and July.

Second-class postage paid at Indianapolis Ind. and additional mailing office.

SCIENTIFIC ARTICLES

641 **Management of Penetrating Thoracic Injuries—**
John L. Glover, M.D.
20th Continuing Medical Education article

646 **Outpatient Laparoscopic Sterilization With Silicone Rubber Bands—**
Martin T. Feeney, M.D.

649 **Clinical Notes: Proctology—**
Richard H. Appel, M.D.

650 **Splenic Artery Aneurysms—**
Peripheral Vascular Conference

SPECIAL FEATURES

618 **Editorial Notes**

624 **Danger: Mixing Prescribed Drugs With Alcohol**

626 **Guest Editorial: PSRO VoPos**

636 **Oliver Wendell Holmes**

669 **Court Action**

672 **Table of Contents: Convention Section**

DEPARTMENTS, MISCELLANEOUS

613 **Medical Museum Notes**

616 **What's New?**

628 **Letters**

630 **There's a Word for It**

639 **Auxiliary Report**

652 **Future File**

659 **CME Quiz**

660 **Book Reviews**

664 **News Notes**

728 **Obituaries**



ABOUT THE COVER

The theme of this year's ISMA annual convention, "Medicine in the Nuclear Age," was chosen to correlate with the medical specialty of James A. Harshman, M.D., who was certified by the American Board of Nuclear Medicine. Doctor Harshman, installed as the ISMA's 136th president during last year's convention, was killed in an automobile accident Dec. 11, 1978.



A reminder

ZYLOPRIM®

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

INDICATIONS AND USE: This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim® (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

CONTRAINDICATIONS: Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.

WARNINGS: ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol® (mercaptopurine) or Imuran® (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

Usage in Pregnancy and Women of Childbearing Age. Zyloprim® (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

PRECAUTIONS: Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or subnormal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

ADVERSE REACTIONS:

Dermatologic: Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.
Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.
A few cases of alopecia with and without accompanying dermatitis have been reported.
In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

Gastrointestinal: Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

Vascular: There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

Hematopoietic: Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim® (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

Neurologic: There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

Ophthalmic: There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

Drug Idiosyncrasy: Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

OVEROOSAGE: Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

HOW SUPPLIEO: 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

WHAT'S NEW?

Orthopedic Equipment of Bourbon, Ind., has a new synthetic-rubber walking heel with removable arch support. Made especially for incorporation into a walking cast, it also has an optional toe-guard. The synthetic polymer has the same skid resistance as rubber.

* * *

Schering Laboratories wishes to clarify the status of 'Chlor-Trimeton' tablets. The 12 mg. strength remains a "prescription only" product. The 4 mg. plain 'Chlor-Trimeton' tablets and the 8 mg. 'Repetabs' tablets have been changed to over-the-counter. All forms of 'Chlor-Trimeton' are promoted exclusively through health care professionals only.

* * *

Searle Health Physics Services offers two new sizes of Nuclibadge® II radiation monitors which are designed to be worn on the fingers of workers whose hands might be exposed to radiation. These are ideal for those who handle radioisotopes or are engaged in flouroscopy. The rings will fit under surgical gloves, permit free finger movement and can be cold sterilized.

* * *

Flexi-Therm has developed a liquid crystal detection system for study of the breast. Color photographs are taken of the breasts in frontal and oblique views when the breasts are covered with a thermally sensitive film which can be readily contoured to display thermovascular patterns. The system can be set up in almost any convenient location.

* * *

Amko Manufacturing announces two sizes of the Poole Abdominal Suction Tube with large apertures to minimize clogging. The tubes are chrome plated and are in two sizes: 23 FR curved and 30 FR straight.

* * *

The Marvel Division of Dayton-Walther Corporation specializes in compact refrigerators. They announce a new model for hazardous locations or for containing hazardous chemicals in laboratory and hospital situations. The "Explosion-Proof" model has been approved by Underwriters' Laboratory for Class 1, group C and D Applications. It has a 6.5 cu. ft. capacity and operates on 115 volt, 60 cycle AC electric current.

* * *

Johnson & Johnson is introducing Dermilite II® Hypoallergenic Paper Tape, a new and improved paper tape for holding wound dressings securely in place. It has a special paper backing and an adhesive mass with superior strength. The tape tears in such a way as to make it easier to find the end of the roll during subsequent use.

* * *

E. R. Squibb is opening a new facility for manufacture of ostomy care products. Squibb's Stomahesive® and the Sur-Fit® appliance system will be produced in addition to a new 12-inch transparent drainable pouch designed for use on postoperative patients.

* * *

Clinical Data, Inc. announces a pneumocardiograph which quantitates periods of apnea and bradycardia. It is capable of producing a 12-hour or 24-hour recording for analysis of suspected apneic periods and any accompanying arrhythmia. The device is named "The Clinical Data PCB Pneumocardiogram". It operates on batteries and stores data in a cassette recorder which is examined on a priority basis by trained personnel. A verbal report on significant anomalies is ready in one hour and a graphic report usually within 24 hours.

* * *

Searle announces that FDA approval has been received for distribution of the Tatum-T, a copper-bearing nonhormonal intrauterine contraceptive. The device has been widely used in other countries. Actual introduction to the U.S. awaits approval of labeling. The Tatum-T is smaller than standard IUDs and releases small amounts of copper to enhance contraceptive activity.

* * *

The 3M Company has a unique dual bearing femoral head prosthesis that is highly versatile and more conservative in surgical concept. A brochure describing the prosthesis is available on request to the company.

* * *

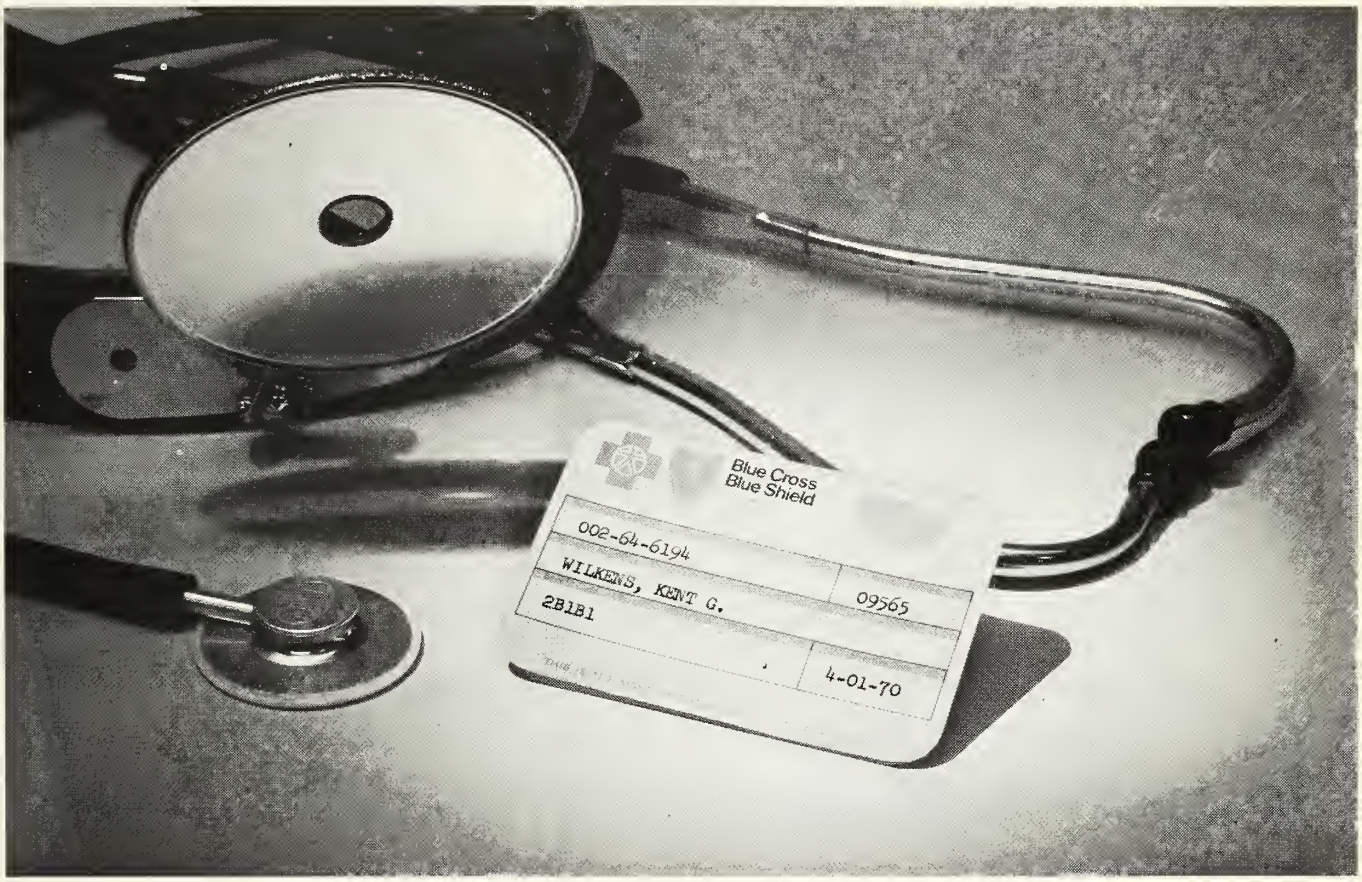
The 3M Company has self-adherent foam pads with pre-cut apertures and edges that simplify preparation of dressings for decubitus ulcers. Ring-like sections of the pad are removed in the center to make a correct hole size and outer edges are removed in the same manner. Unused rings and edges may be combined to make additional dressings. The dressings are adhesive backed to stay in place.

* * *

The Orthopedic Equipment Company of Bourbon, Ind., has a new cast positioning block, made of plastic. It is lightweight, durable and easy to clean. Plaster may be easily removed after hardening. The block works in either of two positions to provide different heights of support for arms or legs.

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- One full year in-hospital care
- 100% semi-private room and hospital extras
- Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy
- $250,000 Major Medical Benefits

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Mel Torbeck, Mass Marketing Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4340.

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark. Nat'l Assn. of Blue Shield Plans

Blue Cross Blue Shield
of Indiana

EDITORIALS

'There Is Work for Us to Do'

Dr. Tom Nesbitt, outgoing president of the AMA, made a short and inspiring speech to the House of Delegates during the annual meeting.

His theme was a quotation from the document that established the AMA in 1847. The founders pledged themselves to promote "the science and art of medicine . . . and the betterment of public health."

He praised this founding philosophy because it is as practical now as it was long ago. Science and technology are improved but they still must be applied in an artful, compassionate manner.

Never before have we been able to do as much for patients in terms of added health and life, Dr. Nesbitt noted. And, he added, never before has there been as much confusion about the relationship between the science and art, and the public health. Preventive measures are widely touted as less expensive alternatives to therapeutic care.

Dr. Nesbitt said increased cost of care has raised socio-economic and political issues in medicine. "Medicine has gone public . . . (we must) rearrange our priorities accordingly," he declared. "We cannot do what we believe is best for medicine without at least considering the socio-economic and political implications."

Dr. Nesbitt went further. "We are eventually going to have to take hold of new responsibilities in the actual financing of care . . . we will have to provide more guidance and direction to changes in health care financing."

He pointed out that the prepaid route is becoming more popular. And he added that, if it is not the commanding choice, physicians must make sure the existing alternatives are not only effective in terms of quality, but also efficient in terms of cost.

The second imperative, Dr. Nesbitt said, looks to the public image of practicing physicians and medical societies. He thinks professional societies would have more and better members if the societies talked more about professional pride and less about "benefits of membership."

He thinks we should say more about our professional responsibilities and less about our individual rights.

"Perhaps we should say more about the hard work that lies ahead of us—individually and institutionally—and less about the work already done," he said.

In closing, Dr. Nesbitt cited the reason why the AMA has existed 132 years and why his audience was gathered at the 128th annual convention: "Because there is work for us to do."

NGU: Most Common VD

"The most common venereal disease among college students is nongonococcal urethritis (NGU)." Julius Schachter, a Ph.D. professor of epidemiology at the University of California, has studied several university health clinics across the country and finds NGU ten times more common than gonorrhea. Chlamydia trachomatis is the organism responsible in 40% of the cases. The bacterium can produce complications in men and women the same as the gonococcus and can cause visual trouble in newborns because silver nitrate prophylaxis is useless.

GAO Drug Lag Findings

The General Accounting Office has completed a two-year study of the drug lag and the FDA approval system. The summary occupies 22 pages of testimony before a House subcommittee but can be further summarized by saying there has been and is now a delay in approval of new drugs and that there are no identifiable advantages attached to the delay. Representative Scheuer of New York, who requested the GAO study two years ago, is quoted as stating: "In recent years it has become apparent that sick people in the United States do not always have available to them the best and most effective drugs."

Lilly Granted Injunction

The functions of the patent law in encouraging invention and in enabling the recovery of the costs of research and invention are especially beneficial in the pharmaceutical field. A federal judge of a New Jersey court recently granted Eli Lilly and Company a preliminary injunction against two companies for infringing the Lilly patent on Keflex.

Judge Meanor said in part: "The purpose of the Patent Act is to encourage exactly what Lilly has done. It has invested millions of dollars in a new drug of dramatic and beneficial properties."

Richard D. Wood, Lilly board chairman, comments: "This decision helps to reinforce the vitality of the patent system and to justify continued investment in the uncertain search for new drug products."

Activated Charcoal Doses

The antidotal capacity of activated charcoal is often overestimated, resulting in undertreatment. A recent article in JACEP, journal of the American College of Emergency Physicians, advises that, since charcoal is safe in varying amounts, the standard dose should be enlarged. A minimum dose of 30 grams is recommended.

CONTINUED ON PAGE 623

Concerned About Your Future Financial Security?

Your CPA can help.

A Certified Public Accountant is a financial planning expert. Because of his familiarity with tax planning, retirement planning and estate planning, a CPA can render invaluable assistance as your family financial advisor.

Are your financial affairs arranged in such a way as to minimize taxes, while maximizing what is available for you to enjoy now and during retirement? Have you provided adequately for those you may leave behind?

To insure your family's security—now and in the future—consult a financial planning professional, your CPA.



Certified Public Accountants
perform the full range of accounting services

CPA

More than a title, it's a profession

Indiana CPA Society
921 E. 86th Street, Suite 102, Indianapolis, Indiana 46240, 317-257-6284



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique that we have over $4,000,000.00 in personal loans made to Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Calin G. Haza
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis Morris Plan

Tenuate®
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request from Medical Research Department, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon (Dillon), R.H., and Leyland, H.M.: A comprehensive review of diethylpropion hydrochloride In, Central Mechanisms of Anorectic Drugs, S. Garattini and R. Samanin, Ed., New York, Raven Press, 1978, pp. 391-404

Merrell

9-4672 (Y957A)

Overweight may not always be simple... complications can develop.*

Complicated or not...

Tenuate® Dospan® (IV)

(diethylpropion hydrochloride NF)

75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

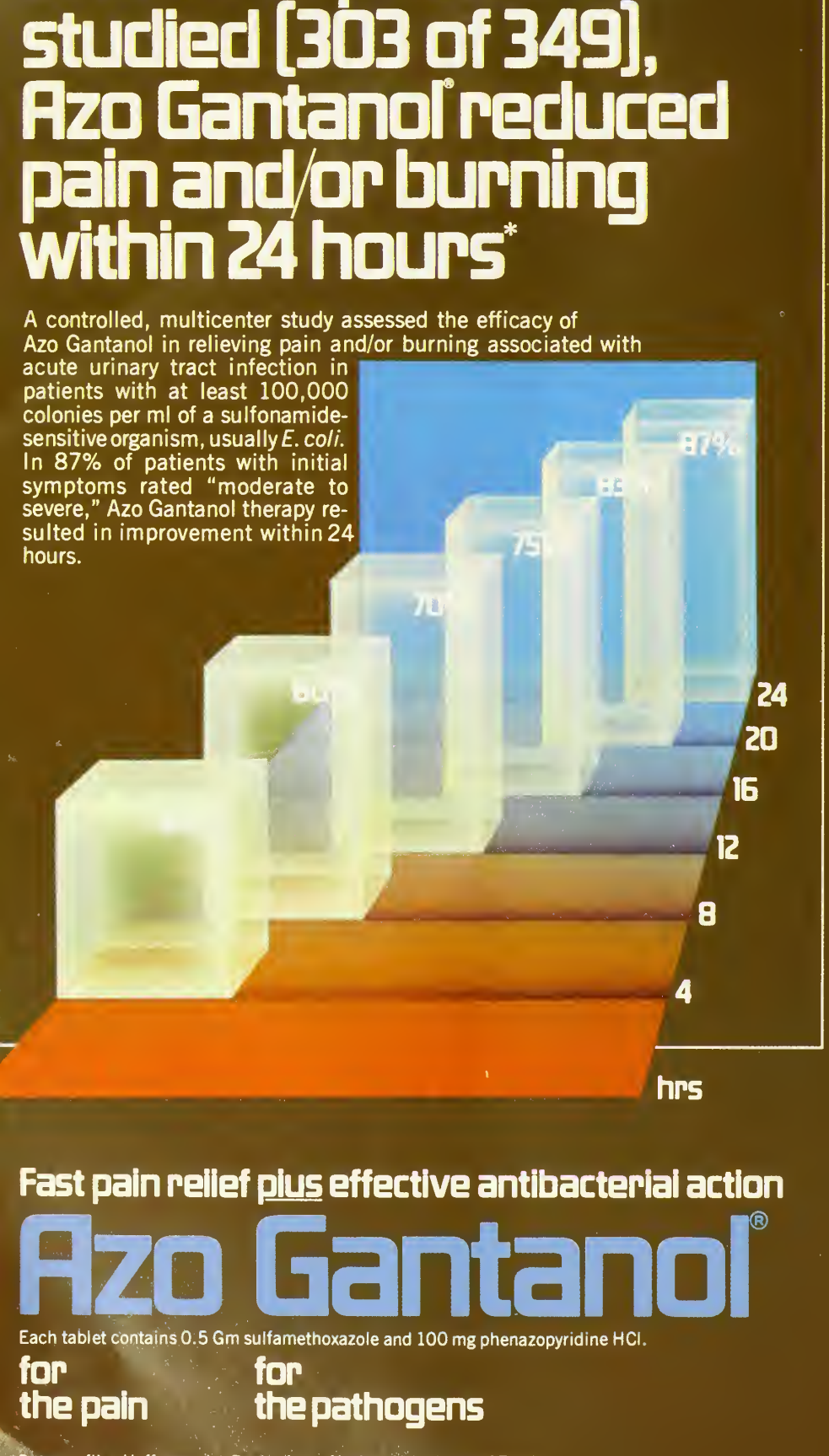
Merrell

For prescribing information see opposite page.

Important data on the pain of acute cystitis:

In 87% of patients studied (303 of 349), Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain

for the pathogens

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete p uct information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis pyelitis and cystitis) due to susceptible organ (usually *E. coli, Klebsiella-Aerobacter, Staph coccus aureus, Proteus mirabilis,* and, less f quently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note: fully coordinate *in vitro* sulfonamide sensitivi tests with bacteriologic and clinical response aminobenzoic acid to follow-up culture media increasing frequency of resistant organisms li the usefulness of antibacterials including sul fonamides.** Measure sulfonamide blood levels variations may occur; 20 mg/100 ml should b maximum total level.

Contraindications: Children below age 12; su fonamide hypersensitivity; pregnancy at term during nursing period; because Azo Gantanol tains phenazopyridine hydrochloride it is con dicated in glomerulonephritis, severe hepatit uremia, and pyelonephritis of pregnancy with disturbances.

Warnings: Safety during pregnancy not estab Deaths from hypersensitivity reactions, agran tosis, aplastic anemia and other blood dyscra have been reported and early clinical signs (s throat, fever, pallor, purpura or jaundice) may dicate serious blood disorders. Frequent CBC urinalysis with microscopic examination are r ommended during sulfonamide therapy.

Precautions: Use cautiously in patients with paired renal or hepatic function, severe allerg bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria a stone formation.

Adverse Reactions: *Blood dyscrasias* (agran- ulocytosis, aplastic anemia, thrombocytopen leukopenia, hemolytic anemia, purpura, hypo thrombinemia and methemoglobinemia); *alle reactions* (erythema multiforme, skin eruptio Stevens-Johnson syndrome, epidermal necro urticaria, serum sickness, pruritus, exfoliativ dermatitis, anaphylactoid reactions, periorbi edema, conjunctival and scleral injection, ph sensitization, arthralgia and allergic myocard *G.I. reactions* (nausea, emesis, abdominal pa hepatitis, diarrhea, anorexia, pancreatitis an stomatitis); *CNS reactions* (headache, periph neuritis, mental depression, convulsions, ata hallucinations, tinnitus, vertigo and insomnia *miscellaneous reactions* (drug fever, chills, to nephrosis with oliguria and anuria, periarteriti nodosa and L. E. phenomenon). Due to certa chemical similarities with some goitrogens, d uretics (acetazolamide, thiazides) and oral h glycemic agents, sulfonamides have caused instances of goiter production, diuresis and h glycemia. Cross-sensitivity with these agents exist.

Dosage: Azo Gantanol is intended for the acu painful phase of urinary tract infections. *Usu adult dosage:* 2 Gm (4 tabs) initially, then 1 (2 tabs) B.I.D. for up to 3 days. If pain persi causes other than infection should be sought After relief of pain has been obtained, contin treatment with Gantanol (sulfamethoxazole) be considered.

NOTE: Patients should be told that the orang dye (phenazopyridine HCl) will color the urin

Supplied: Tablets, red, film-coated, each co ing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 50

ROCHE

Roche Laboratories
Division of Hoffmann-La Roch
Nutley, New Jersey 07110

EDITORIALS

CONTINUED FROM PAGE 618

Antibiotic Resistance

Treatment of bacterial infections by newly introduced antibiotics which, at first, appear to be specifically effective against the bacterial strain under treatment, is highly successful originally. Later, the bacterium appears to gradually develop resistance to the antibiotic. This may be due either to actual development of resistance by the bacterium or to the fact that a small proportion of the bacteria were originally, due to mutations, resistant. Subsequently, the resistant organisms increase rapidly because of the resistance and the sensitive bacteria are eliminated due to the sensitivity. As a result, efficacy of antibiotic therapy for the bacterium declines and a new antibiotic is required.

Patricia Harris: Abrasive? Spitfire?

Patricia Roberts Harris, 55, has replaced Joseph Califano as Secretary of the Department of Health, Education and Welfare. A lawyer, she brings to HEW much of the same Lyndon Johnson "fair deal" outlook as Califano.

Harris is regarded as more of a team player, but her prickly independence is reminiscent of her predecessor. She can be expected to enthusiastically support the Administration's goals at HEW, including the establishment of a separate Department of Education, a reorganization that Califano not so privately opposed to the discomfiture of the White House.

Harris hasn't been rated as one of the heavyweights of the Cabinet, perhaps because her Department ranks last in importance. Now she has her chance. Long active in the Democratic Party, she served two years as Ambassador to Luxembourg in 1965-67 and was later an alternate delegate to the United Nations. She was an attorney with the Justice Department in the early 1960s, and later became a successful private lawyer in a Washington, D.C. law firm. She has been a director of some of the nation's largest corporations.

In the press brochure distributed at her news conference following announcement of her appointment to HEW, copies of news stories about Harris were included. They carried such headlines as "Forceful HUD Secretary is turning her critics around; Patricia Harris, HUD's Velvet-gloved Iron Hand; HUD Secretary Harris Steps Quickly Into the Fray; and Patricia Harris-The No-Nonsense Chief of HUD."

"Abrasive," "pugnacious," "spitfire" were some of the adjectives used in the articles to describe Harris; apparently, these are descriptions with which she is comfortable.

As a "team player" Harris said nothing remotely controversial at the news conference. She has filled out and returned an inane White House questionnaire sent to all Cabinet members asking them to rate their subordinates on a variety of qualities. Califano had refused to honor the questionnaire.

But there is still a lot of head scratching in Washington. The Administration's two major health initiatives—hospital cost containment and the national health plan—are widely and strongly identified in the Congress with Califano. Harris has no expertise in health and no strong clout with the small but powerful "Old Boy" Democrat band of brothers in the Congress. And it will take her months to learn the ropes. *(AMA Editorial)*

FDA Admits Drug Lag

Some progress has been made with the drug lag in Washington. Everyone acknowledges that it exists. For a long time there were as many opinions on the matter as there were experts. The experts of the FDA, until recently, denied the existence of drug lag in approval by FDA of new drugs. Now the FDA agrees that a drug lag exists but, says the FDA, it is a minor problem.

All others who have an interest in the prompt and proper acceptance of new drugs know it is a major problem, but disagree on the cure.

FDA Commissioner Donald Kennedy insists that the HEW Drug Regulation Reform Act, now before Congress, is the only cure. Commissioner Kennedy is leaving or has left the FDA, but his beliefs may be presumed to be typical of the FDA hierarchy. This places the FDA in the unenviable position of being wrong on two counts—namely, the problem is not minor and a huge dose of bureaucracy will not make it go away.

Lewis Engman, new president of the Pharmaceutical Manufacturers Association, says the solution lies within the FDA which is now, without legislation, improving its processes. Better communications to resolve scientific questions, earlier submission of manufacturing data, acceptance of foreign data, and less red tape are recommended by PMA.

The chairman of PMA, Dr. W. Clarke Wescoe, opines that there is no need for a new law. He also thinks that there is no evidence to support the contention that greater drug safety is achieved in the U.S. because of delays in drug approval.

Dr. Wescoe also emphasizes the obvious point of business philosophy, which recognizes that it is greatly to the disadvantage of any company to have a drug released upon which millions of dollars have been invested only to find it is either ineffective or toxic.

It appears that there are now, on and around Capitol Hill, enough wisdom and enough facts to lead to a satisfactory solution to the drug lag.

Surgeon General's Advisory

Danger: Mixing Prescribed Drugs With Alcohol

JULIUS B. RICHMOND, M.D.
Surgeon General of the Public Health Service
Washington, D.C.

Recent events have highlighted the importance of physicians and health professionals giving greater attention to possible dangers of prescribing certain drugs to individuals who abuse alcohol.

During the past several years there has been a major increase in this country in the medical and non-medical use of drugs. Concurrently, the wide use of alcohol by both men and women enhances the probability that alcohol and another drug will act simultaneously in many individuals, with serious and potentially fatal consequences. Indeed, alcohol use in combination with other drugs accounts for approximately 20% of the total number of accidential and suicidal deaths per year which are drug-related.

Concern over these trends prompts me to alert the medical profession to the special problems of prescribing certain drugs for patients who consume alcohol.

I wish to remind all physicians and health professionals that:

- Many commonly prescribed drugs have altered therapeutic and/or adverse medical effects when taken with alcohol. These drugs include not only sedatives, hypnotics, narcotics, antidepressants and tranquilizers, but also certain antihistamines, analgesics, anti-coagulants and anti-infective agents.

- Minor tranquilizers as well as other CNS depressants are frequently used by patients in combination with alcohol despite warnings to the contrary. This combined use may produce adverse medical consequences. Moreover, the resultant potentiation of CNS depression can impair performance of tasks requiring alertness—such as driving—increasing the likelihood of injury and even death. The combination itself can lead to death by accidental overdose or by suicide.

- The use of marijuana and other illicit psychoactive substances is widespread, and this use often occurs in combination with alcohol, or other licit psychoactive drugs.

Therefore, I urge all physicians and health professionals to:

1. Routinely document the history and scrutinize the pattern of alcohol consumption for individual patients to determine the possible relationship between presenting complaints and mixing drugs with alcohol;

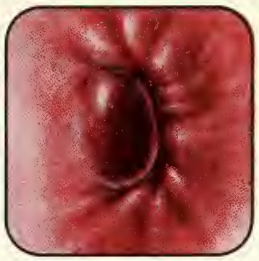
2. Be alert to the possible interaction of prescribed, over-the-counter, or illicit drugs—singly or in combination—with alcohol;

3. Pay careful attention to the section in the package insert that deals with drug-alcohol interactions and consult the current medical literature and references for specific problems;

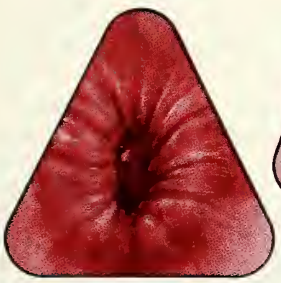
4. Limit as much as is practical the quantity of drugs dispensed with any one prescription and monitor the patient with regular follow-ups for unexpected reactions to the medication;

5. Consider, both in the choice of therapy and in the evaluation of the patient, the likelihood of the patient's adherence to your admonition (and that of warning label on the prescription) against using alcohol while taking medication.

For hemorrhoids and other anorectal conditions



External hemorrhoids



Internal hemorrhoids



Pruritus ani



Proctitis



Anal fissures



Easy to handle, easy to insert, comfortably shaped—Rx only

Easy to apply, nonstaining—Rx only

Prescribe Anusol-HC®

Suppositories/Cream

for symptomatic relief

- Effectively reduces inflammation and edema
- Rapidly relieves pain and itching

ANUSOL-HC® SUPPOSITORIES
Hemorrhoidal Suppositories
ANUSOL-HC® CREAM
Rectal Cream with Hydrocortisone Acetate
CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg, bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and certified coloring in a hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian balsam, 18.0 mg; zinc oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil, glyceryl stearate and water.

Indications: Anusol-HC Suppositories and Anusol-HC Cream are adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas and relief of local pain and discomfort following anorectal surgery.

Anusol-HC Cream is also indicated for pruritus ani.

Anusol-HC is especially indicated when inflammation is present. After acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: Anusol-HC® Suppositories and Anusol-HC® Cream are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy, they should not be used unnecessarily on extensive areas, in large amounts, or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. If irritation develops, Anusol-HC Suppositories and Anusol-HC Cream should be discontinued and appropriate therapy instituted.

In the presence of an infection the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Care should be taken when using the corticosteroid hydrocortisone acetate in children and infants.

Anusol-HC is not for ophthalmic use.

Dosage and Administration: Anusol-HC Suppositories—Adults: Remove foil wrapper and insert suppository into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories.

Anusol-HC Cream—Adults: After gentle bathing and drying of the anal area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides. Then maintain patient comfort with regular Anusol Ointment.

NOTE: If staining from either of the above products occurs, the stain may be removed from fabric by hand or machine washing with household detergent.

How Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) and 24 (N 0047-0089-24); in silver foil strips with Anusol-HC W/C printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01); with plastic applicator, detachable label.

Store between 15°-30° C (59°-86° F.)

Full information is available on request.

Warner/Chilcott
Division, Warner-Lambert Company
Morris Plains, N.J. 07950

AN-GP-91

The professional source of anorectal comfort

Guest Editorial

PSRO VoPos

RICHARD J. NOVEROSKE, M.D.
Evansville

The other evening I attended a meeting of our hospital medical staff; we listened to representatives from the area Professional Services Review Organization talk to us about our duties and shortcomings in carrying out the PSRO program at our hospital.

Like most hospital staffs we had chosen some time ago to do our own review of our clinical work—delegated status, I think it's called. We wanted to do our own reviews, rather than be harassed by outsiders. This way seemed to be the lesser evil. We felt that in this way we could control our work and have more freedom.

But it hasn't worked out well. Our reviews of our work are not final. Samples of our charts and analyses are reviewed by a nurse member of the area PSRO staff, and she refers her problems with our work on to others in the bureaucracy, if we don't comply with her findings and recommendations. So we are controlled by outsiders.

And the chart reviews and denials of federal payment for hospitalization of Medicare and Medicaid patients by our staff have created a great deal of acrimony in our staff. I have seen the same result in other medical staffs. In doing the police work according to the rules from outsiders, we have reduced ourselves to VoPos, like the VolksPolizei of East Germany, who tyrannize their own people in response to the dictates of their Russian masters. There may be a more contemptible occupation, but VoPo work ranks near the bottom. And that is what we have become, as we have tried to "preserve what we can of our freedom," and do the chart review work and denials ourselves. Our federal government bureaucrats are clever enough to know that physicians would choose to "police themselves, rather than have the federal government do it," and have capitalized on this natural bent in us. In this way, the bureaucrats avoid almost all of the fights, squabbles, arguments, and general acrimony that their standards cause. The general purposes of PSRO are to hold down costs and increase the quality of care; that's why HEW created PSROs. But patients don't understand why they can't stay in the hospitals longer, why they can't go to the nursing home of their choice after hospital discharge, etc. And they blame the attending physicians. The attending physicians quarrel with the reviewing physicians on the staff who deny federally funded care, and there is no end to the in-fighting.

The PSRO plan seems sound when one looks at it from a strictly scientific point of view. For each disease or diagnosis there are certain clinical findings that are to be present, and certain lengths of stay in a hospital that are adequate for diagnosing and treating most of these diseases. If more time is needed in the hospital, the attending physician need only document, to the satisfaction of the reviewers, why more time is necessary. If he can't document the need satisfactorily, the payment for the patient's hospital stay will be ended. Detailed statistical calculations have been done to establish what is needed for good, scientific medical care.

The problem with this scientific approach is that the practice of medicine is not a science, but an art. While we try to use scientific principles in our practices, most physicians find that they have to rely on something more to treat their patients—art.

Art is defined as a personal, unanalyzable, creative force that stands beyond skill, artifice, or craft.

Try to tell these bureaucrats though that they are trying to analyze the unanalyzable with their scientific, statistically worked out approach to medical diagnosis and treatment, and they look at you as if you were stupid. For after all, they have reams of detailed, scientifically and mathematically worked out documents and the force of the federal government to back them up in determining what should be an adequate hospital stay and good care for the typical patient.

All you can confront them with in argument, is reality.

No patient is typical, and the processes that go on in a physician's mind or in the interchange between him and his patients are not finally analyzable. Despite the federal government's huge effort to reduce the practice of medicine to a science, this effort will fail. Medicine is an art.

I know from bitter experience how fallacious this application of PSRO standards can be. I did a stint of physician advisor work for PSRO in my hospital because I was appointed to the committee. In the course of the work, I applied the scientific criteria of PSRO to the facts in the patient's chart and found that I couldn't justify the admission or the length of stay. After conference with the attending physician and no further reasons for the admission coming forth, I denied federal payment for further hospitalization, in accord with the PSRO standards and procedures. So the attending physician dis-

CONTINUED ON PAGE 634

INTRODUCING THE AUDI 4000.



In an advance road-test report, Road & Track's "Letter from Europe" columnist called the new Audi 4000 — or the Audi 80, as it is called in Europe — "... by far the best car announced in the past year. In fact it's the best full-size European car under two liters."

Was it because of the superb handling? The surprisingly spacious interior? Or was it because the Audi 4000 gets an E.P.A. estimated 22 miles per gallon and an impressive 34 MPG estimated highway mileage? (Compare this estimate to the estimated MPG of other cars. Your mileage may vary with speed, weather and trip length. Highway mileage will probably be less.)

Find out for yourself why the Europeans are so impressed. Come in and test drive the new Audi 4000.

PORSCHE+AUDI

Nothing Even Comes Close

See your nearby Audi dealer.

LETTERS

Says CME Article Contained Certain Incomplete Information

I have read the article "Facial Paralysis: Diagnosis and Treatment," appearing in the March 1979 issue of THE JOURNAL and since the article is featured as containing medical education, I felt compelled to point out what I consider to be incomplete information relative to the role of electromyography in the diagnosis and prognostic assessment of facial nerve pathology.

The authors have either not researched the literature sufficiently concerning electromyography, or have had unfortunate or unsatisfactory experiences with their electromyographers, and lest your readers carry away the authors' conclusion as being the final answer, let me point out the latest information concerning the matter.

The statement is made that electromyography is not useful since findings are not demonstrated until 14 to 21 days have elapsed since the onset. Any good electromyographer recognizes that helpful information can be derived from performing electromyographic testing as early as the first or second day, and that serial studies performed at 24- to 48-hour intervals can be very revealing and meaningful from the standpoint of progressive deterioration of facial nerve function. Incidentally, the positive findings of axonal disruption are apt to become evident within 5 to 7 days and not the 14 to 21 mentioned. The 5 to 7 days relates to the shorter distance of the facial nerve undergoing Wallerian degeneration.

The author should have mentioned the work of Dr. Carl Granger, who states that electromyographers who merely look for signs of denervation are overlooking information derived from evaluating the patient's capability of generating motor unit action potentials in 4 or 5 specific muscle groups innervated by the facial nerve. He suggested serial studies starting on day 1, and concluded that the full residual effects of the facial nerve pathology process become maximum in 72 hours, and any further changes are not too likely.

Most importantly, Dr. Granger ascribes great prognostic significance to the presence of voluntarily generated motor unit potentials in the muscles tested. For example, should the patient demonstrate some motor activity in 4 or 5 muscles on the fifth day, prognosis is good for recovery; whereas absence of motor unit activity in 4 or 5 muscles favors a poor or incomplete recovery. Secondly, not to be overlooked, is the use of the "blink reflex" as described by Schenck and Manz,[1] which also affords some prognostic correlations, and again can be done on day 1, as well as serially. Schenck and Manz described appearance of the R-1 and R-2 components of the blink reflex and their persistence or reappearance speaks for a good prognosis. The blink affords an opportunity for a portion of the reflex arc to pass proximal to and actually pass through, as well, the area of nerve pathology which is not true with most conventional electrical stimulation studies done through the nerve and facial muscles themselves.

I also realize the dilemma presented to the authors in trying to determine which of the cases of facial paralysis might respond to nerve decompression; however, despite the evidence we have been able to accumulate as pointed out above, and even considering only those cases that show, on the basis of initial testing, a possible poor prognosis, many of these cases do not fall into the 5% to 10% who end up with permanent disfigurement.

REFERENCES

1. Granger CV: Prognosis in Bell's palsy. *Arch Phys Med Rehabil,* 57:33-35, 1976.
2. Schenck E, Manz F: The blink reflex and Bell's palsy: The new developments in electromyography and clinical neurophysiology. *Desmedt,* Karger-Basel, 3:678-681, 1973.

JOSEPH S. STRATIGOS, M.D.
Chief, Rehabilitation Medicine Service
Veterans Administration
Lakeside Hospital
Chicago, Illinois

Dr. Stratigos' comments regarding facial nerve testing emphasize the difficulty physicians encounter when they attempt to predict the recovery of facial function in patients with a facial paralysis.

Although, admittedly, the electroneuronography has some limitations, it has provided the earliest and most accurate information for the prognostication of the eventual recovery of the facial nerve function.

The EMG, as pointed out in our original article, has not been helpful early in the course of the disease and is no longer being used routinely in patients with a facial paralysis.

The blink reflex test has not been done in our institution, and for this reason I do not feel that I can comment on the accuracy and validity of this test.

LAVERNE B. TUBERGEN, M.D.
Chief, Section of Otology
Dept. of Otohinolaryngology
I.U. School of Medicine

Letters will be published as space permits and at the discretion of the editor. They will be subject to editing. Reader response is encouraged. Letters should be addressed c/o THE JOURNAL of the Indiana State Medical Association 3935 N. Meridian St., Indianapolis 46208.

2 NEW ISMA sponsored insurance plans available to you

Two new essential insurance plans have been added to broaden the range of ISMA sponsored plans. An In-Hospital Protection Plan and a Medicare Supplement Plan brings the total number of supplemental insurance plans to six that are available to eligible member physicians and professional corporations.

NEW PLANS:

IN-HOSPITAL PROTECTION PLAN provides cash benefits of $20 thru $100 per day (when accidental injury or sickness causes hospital confinement). Benefits are payable directly to you, the insured member, and commence the very first day of covered hospitalization. Intensive care and convalescent home benefits included. Spouses and eligible dependent children may be included. Benefits reduce at age 65.

MEDICARE SUPPLEMENT PLAN provides "gap filler" benefits so essential today. Medicare revised their benefits effective January 1, 1979 and these ISMA sponsored plans have been revised to update these changes, supplementing both Medicare Part A and Part B.

OTHER INSURANCE PLANS AVAILABLE:

- **INCOME PROTECTION PLAN** provides an income of up to $2,000 monthly if you are disabled and unable to work due to a covered accident or illness.
- **EXCESS MAJOR MEDICAL PLAN** provides coverage after your present plan is exhausted. Up to $500,000 coverage with a $20,000 deductible. Unlimited surgical schedule and includes extended care and nursing home benefit.
- **OVERHEAD EXPENSE PLAN** provides needed dollars to help you pay off overhead expenses (employees' salaries, rent, utilities, property taxes, etc.) in the event of your covered disability. When disability strikes—your business overhead expenses keep right on going—even when you can't.
- **FAMILY INSURANCE PLAN** provides benefits up to $100,000 in the event of your death.

Underwritten by Continental Casualty Co. and Valley Forge Life Insurance Co., Chicago, Illinois

COUPON

For information on the ISMA sponsored plans including costs, terminations, exclusions, etc.

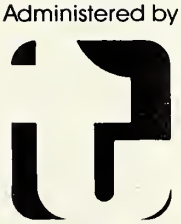
☐ In-Hospital Protection Plan
☐ Medicare Supplement Plans
☐ Income Protection Plan
☐ Excess Major Medical Plan
☐ Overhead Expense Plan
☐ Family Insurance Plan
☐ Professional Corporation

Dr. _____

Street _____

City _____ Zip _____

Administered by



j. russell townsend and associates

Mail to:
Indiana State Medical Association
3935 North Meridian Street
Indianapolis, Indiana 46208

There's a Word for It

LIE DOWN

RICHARD J. NOVEROSKE, M.D.
Evansville

Many people say to others, including those of the opposite sex, "Lay down," when the proper expression is "Lie down."

I hear it used in hospitals and offices, by both trained professionals and those who haven't had formal training.

We really should say, "Lie down." Not just because it is the proper verb, the intransitive verb, but because "lay" has a sexual connotation. It means to copulate with, in a vulgar sense, and this meaning is also carried over if we tell a patient, particularly of the opposite sex, to "lay down," "lay still," or "lay," when we really want the patient to lie down, lie still, or lie in place. It's insulting to the patient, even if done without any conscious intent to hurt the patient's feelings. It takes no more effort to say "lie" rather than "lay," and it doesn't take much effort to make a habit of using the proper verb and avoid insulting others.

I think this is also why so many people are insulted by being referred to as "laymen" or "lay people." There's more than just the denotation that they are non-professional; there's also the connotation that they have sexual intercourse in a vulgar way.

I think it's best to ask our patients to "lie down."

Rent, Lease or Buy...

Everything you need for your office at one place . . .
Mix and match furnishings and accessories to suit your budget, and your good taste.



BFC
BUSINESS FURNITURE CORPORATION
101 S. PENN. ST. • INDIANAPOLIS, IND. 46204 • PHONE: 317 631-1400



Tagamet®

brand of

cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

When painful spasm is the presenting symptom...



...in the functional bowel/irritable bowel syndrome*

Bentyl®

(dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

8-4420 (Y736A) MNR-804

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS
Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.
THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.
For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis, myasthenia gravis WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.
Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include: xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis, cycloplegia, increased ocular tension; loss of taste, headache, nervousness; drowsiness, weakness; dizziness, insomnia, nausea, vomiting, impotence; suppression of lactation, constipation, bloated feeling, severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations, some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.
Usual Dosage: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.
Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

PSRO VoPos

CONTINUED FROM PAGE 626

charged the patient, who died at home two days later. By PSRO's standards, I was right, and the attending wrong. But in reality, the attending was right; I was dead wrong, and the patient was dead.

In the past six months this has happened on another occasion in our hospital. And I know of at least one denial in a nearby hospital during this time that also resulted in a patient's death. That makes three deaths that I know of, without searching for them.

I mentioned these three deaths to the PSRO area staff at our recent medical staff meeting with them. They said, "The patients probably would have died anyway." They couldn't understand. But the physicians who were present seemed to understand; they understand that our duty is to preserve life. They sensed that something is wrong.

I think this is happening across the United States. Medicare and Medicaid patients are being discharged because their hospital stays can't be justified scientifically, and a number of them are dying when they need to be in a hospital. How many? I don't know.

The PSRO plan is hypothetically a sound one; it's very scientific. But it doesn't mesh with reality, and patients are getting chewed up by the process, members of the medical staffs are getting angry with one another, and the public is increasingly holding us physicians responsible. All because some federal lawmakers and their bureaus have tried to do the impossible—to define the undefinable—to analyze an art.

Most of us know that there are patients, situations, or things we sense that we can't express well in scientific or statistically valid terms. Maybe part of it is a language barrier. But I think it's more than that. Many of us have found situations with patients where we sensed something was wrong, couldn't spell it out, and needed time to search and try.

I think we physicians should quit being VoPos —stop accepting delegated status and doing the dirty work in our own medical staffs for PSRO. I doubt that even the federal government can find people who can come in from the outside and who are willing to do the dirty work in large enough numbers; we've been tricked by our desire to "preserve our freedom" into doing the dirty work and taking the rap for it. Let the outsiders, whoever they may be, do the dirty work and be responsible to an angry patient or his family.

It's a contemptible thing to be a VoPo. Let's stop it.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android® /5 mg. Buccal/ 10 mg. Oral / 25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

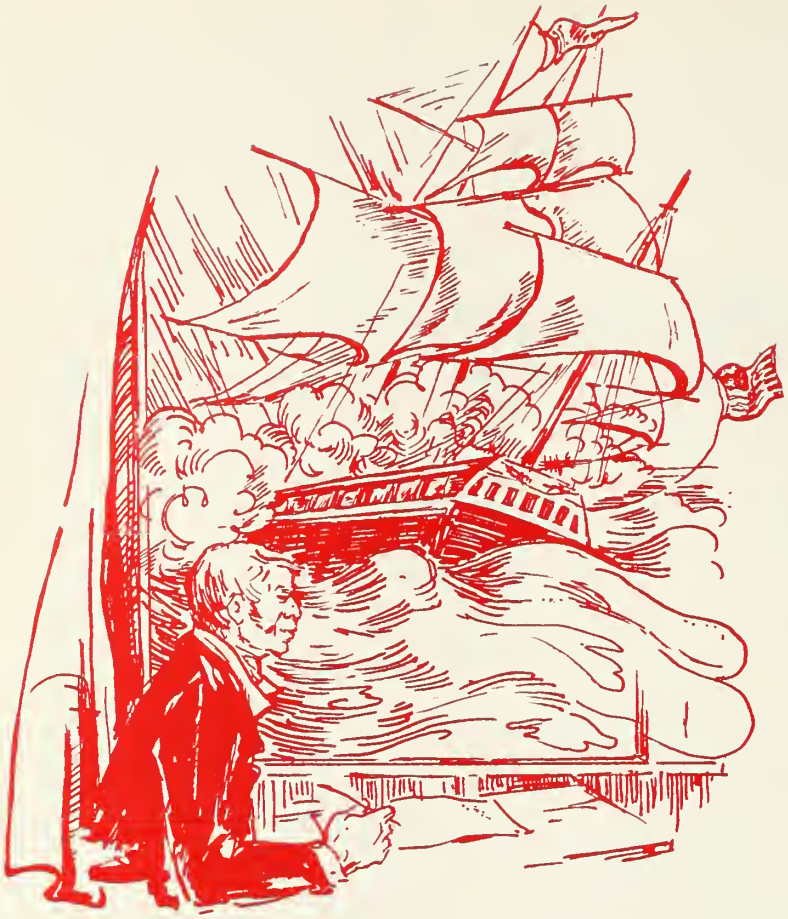
Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR



Physician Poet Anatomist Essayist

Oliver Wendell Holmes 1809-1894

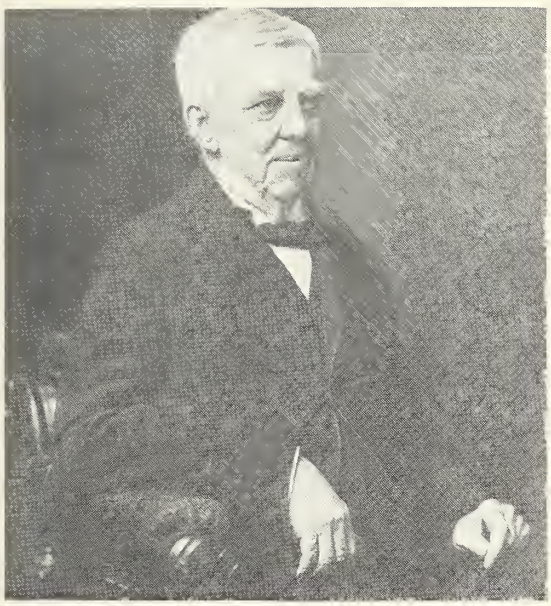
JAMES R. DAGGY, M.D.
Richmond

A PLEASANT DINING ROOM called the 1809 Room helps charm the campus of Miami University in Oxford, Ohio. It is called the 1809 Room in honor of the year of the founding of the university. In that same year Napoleon was in Austria struggling with Alexander of Russia, Simon Bolivar in South America was planning the freedom of his countrymen, China was sleeping and preparing for the Opium Wars, England was distinguished by Charles Darwin, and James Madison was President of the United States. In Kentucky, destined to change politics and become the conscience of the country, was born Abraham Lincoln while one of America's literary greats, Edgar Allen Poe, was born in Boston. Across the river in Cambridge, Massachusetts, Oliver Wendell Holmes came into the world.

At Harvard, Holmes established himself as a superlative poet for occasions, a skill he was to keep in old age. Some believe poems for occasions and rhyming are easy, but others believe that light rhyming poetry *with meaning*

The author prepared this summary for THE JOURNAL based on a talk about Dr. Holmes, which he delivered in 1977 to the Wayne-Union County Medical Society.

The portrait of Oliver Wendell Holmes was taken by A. W. Elson & Co. of Boston in 1894. It was provided to THE JOURNAL by Charles A. Bonsett, M.D., Indianapolis. Graphic illustrations provided by Mrs. Walter J. Krause.



is the most difficult form of writing. Holmes excelled.

After Harvard, Holmes would have preferred to have been a gentleman of letters but had not the wealth to support himself in this effort. Almost for a lack of alternative he began to study law with Judge Storey. He found it tedious and dull. During this lost year, the Secretary of the Navy decided the frigate Constitution, fondly known as Old Ironsides, distinguished in the War of 1812 and resting in local Charlestown Harbor, was to be dismantled. In an outburst of feeling, young Holmes went to his room and in three hours composed one of his great poems, *Old Ironsides*—"Aye tear her tattered ensign down . . . The Harpies of the shore shall pluck the Eagle of the sea . . . Her thunder shook the mighty deep and there should be her grave." The following day the poem was published by the BOSTON DAILY ADVERTISER and then by newspapers over the country. Old Ironsides still floats as an historical monument. Oliver Wendell Holmes was famous.

While courting his future wife, Amelia Jackson, he met her uncle, Dr. James Jackson. The medical life fascinated Holmes and, with his father's blessing for a change in profession, he went off to a boarding house for the lectures. He was appalled with some of the harsh realities of medicine but he was intrigued with the boarders. Thus began *The Autocrat of the Breakfast Table,* perhaps Holmes' best read work. The Autocrat series was published 26 years later in the ATLANTIC MONTHLY under the guidance of editor James Russell Lowell.

In March 1833 Holmes transferred to Paris where he trained under the great physicians of the day, including Napoleon's personal physician. He claimed that he learned three principles in Europe: 1) Not to take authority when I can have facts, 2) Not to guess when I can know, 3) Not to think a man must take physic because he is sick.

Holmes returned to Harvard for the 200th commencement to receive his medical degree. During the Phi Beta Kappa celebration, he stood his 5-foot, 5-inch frame on a chair and recited one of his own poems for one hour and ten minutes from memory commemorating the occasion.

Holmes' practice load was not overwhelming and he had time to turn his hand to more serious medical writing. *Dissertation on Acute Pericarditis and Intermittent Fever in New*



England won the Boylston Award, a prestigious prize named in honor of the man who 100 years before had introduced cowpox into the United States. Again he won the Boylston Award with his *Dissertation on Neuralgia and Direct Exploration in Medical Practice* in which he urged physicians to rely more on observation and less on theory. During this time he began his interest in childbirth fever. Why did six of 12 newborns die? He collected questions, notes and thoughts that culminated

in a classic medical lecture, *Puerperal Fever as a Private Pestilence.* He also wrote about carrying of disease from an autopsy or a sick patient to well patients. Championing this new concept in the United States required great courage on Holmes' part because of opposition from many of the outstanding men of medicine of his day. He prevailed.

Oliver Wendell Holmes was the son of Abiel Holmes, Calvinist minister of Cambridge, who failed to grasp the decline of Calvinism in his own time but who painstakingly, lovingly and patriotically wrote the first American History, *American Annals.* His mother was Sally Wendel Holmes, related to all the Brahmins of Boston, the Jacksons, Olivers, Cabots and Quincys; Sally was raised with wealth and in many ways was opposite to Abiel, whose first wife had died five years after their marriage; nevertheless, Sally and Abiel were a happy match. Oliver Wendell and Amelia Holmes were the parents of the "Yankee from Olymus," Oliver Wendell Holmes, Justice of the United States Supreme Court.

Oliver Wendell Holmes was one of the jewels of the Golden Era of American Literature. He was friend, correspondent and compatriot of Emerson, Thoreau, Whittier, Bryant, Longfellow, Agassiz and Lowell.



Holmes was a physician, anatomist, teacher, professor, dean, poet, lecturer, talker, essayist, novelist, advisor, Autocrat of the Breakfast Table, and Poet Laureat of Boston for 50 years. He was Professor of Anatomy at Dartmouth, developer of a private medical school in Boston, and in 1847 became Professor of Anatomy and Physiology at Harvard. He held the Anatomy Chair until 1882. He was also Dean of the Medical School and later Professor Emeritus. Holmes worked out through painstaking gross anatomy much of what is done with a microscope today. Incidentally, he brought one of the first microscopes from Europe to the United States.

Holmes battled for intellectual liberty in essay and in poem, in letters, and in breakfast table conversation. In medicine he attacked quackery, carelessness and smugness. He introduced concepts of heredity and evolution to the United States. He was a fine essayist, perhaps better than a poet. Probably his best known poem today is *Old Ironsides,* although his favorite was *The Chambered Nautilus*—"Build three more stately mansions, O my soul . . . 'til thou at length are free, Leaving thine outgrown shell by life's unresting sea." Throughout his breakfast table series, *Medical Essays, Over the Teacups,* and perhaps best of all in *Pages from an Old Volume of Life,* Holmes superbly made a blend of word and thought, an intertwining of practical ideas and beautiful expression, a cross of humor and serious concept that few have equalled.

While he was still young, Holmes wrote a prophetic poem based on a living relic in his own town, grandfather of Herman Melville, and one who helped lighten the load on the British ships at the Boston Tea Party: "If I should live to be the last leaf upon the tree." Holmes did. He died in 1894 at the age of 85, long after most of his famous contemporaries.



AUXILIARY REPORT

This month's Auxiliary Report was prepared by Dorothy (Mrs. Herbert A.) Schiller of South Bend, our president-elect.

Charlotte (Mrs. Abner P.) Bennett
President, ISMA Auxiliary

"That toddling town," Chicago, was the scene of the AMA Auxiliary's 56th annual meeting, July 22-25, at the Drake Hotel.

The convention featured two exciting "firsts." A full day of in-depth, two-hour workshops was held before the meeting began. These workshops, led by the national committees on AMA-ERF, legislation, membership and health projects, previewed new programs for 1979-80 and gave delegates specific ideas for local projects.

The other innovation was two education sessions sponsored in cooperation with the AMA Council for Continuing Physician Education. "Terrorism, Trauma and Disaster" was explored and approved for three hours credit for physicians. The session was conducted by Martin E. Silverstein, M.D., University of Arizona; David G. Hubbard, M.D., Dallas, Tex. (moderator); and Elissa Benedek, M.D., Ypsilanti, Mich. They said attacks on random civilian population in our country and abroad are occurring with increasing frequency as a result of political terrorism. The unusual weaponry, the type of injury and the long-term psychiatric damage present a new "disease." The symposium addressed the political background, the "epidemiology" of terrorism and special weapons. The psychiatric behavior of both the terrorist and the victim was illustrated.

The second education program, a luncheon session, was of great interest to Auxiliary members as well as to the physicians. Marcia Kraft Goin, M.D. and John M. Goin, M.D. spoke on "Psychological Aspects of Plastic Surgery." They pointed out that the psychological stress of surgery has many aspects. Of particular importance in plastic surgery is body image and body image distortion. Drs. Goin developed the concept that an individual's body image is not static; it changes and evolves as a result of the individual's attitudes, feelings and experiences. They further said that the impact of plastic surgery on an individual's body image frequently causes psychological stress.

Richard M. Scammon, director, Elections Research Center, Washington, D.C., gave the keynote address at the opening of the AMA Auxiliary House of Delegates session. He set the tone of the convention, which was spirited and animated. He spoke on the mood of America, a mood highlighted with ambivalence and confusion. He closed his address, however, on a hopeful note.

Edwin Newman, NBC-TV and radio news commentator, spoke at a luncheon honoring national Auxiliary past presidents and honorary members. His topic was "Preserving a Civil Tongue." Mr. Newman has won a reputation as a watchdog of English usage and made observations on English as it used and abused. He said we cannot figure out our problems unless we can understand one another. Therefore, we must keep the language simple. Grandiose language stands in the way of understanding; it serves as a fence and obstructs communication. He amused and enchanted his audience.

Another highlight of the meeting was greetings from Dr. Tom E. Nesbitt, AMA president, and from Dr. Hubert A. Ritter, AMA-ERF president. A new record was established by raising $1,662,190.86, which is another award-winning performance for AMA-ERF. The Auxiliary contributed $1,015,111.96, the first time the Auxiliary has gone over the million-dollar mark. This outstanding achievement represents an increase of $111,078.86 over last year. Dr. Ritter credited the Auxiliary with the success of AMA-ERF.

Referring to her 1978 inaugural address, Mrs. Manuel Bergnes, AMA Auxiliary president, reevaluated her theme, "To promote medical education and to guard the future of medicine." She assured the delegation that the Auxiliary measured up to the promise of a year ago and carried out its projects during her tenure of office.

The incoming president, Mrs. Ben Johnson, Jr., examined goals for the coming year in her inaugural address and emphasized the need to change. She urged, "Move with me in these changing times." Noting that being static limits growth, she proposed we face the future with courage, optimism and confidence to accomplish our goals.

Happily, Indiana won national awards for the largest number of newly organized counties, the largest increase in membership, and for increasing the total membership this past year. This reflects the hard work and enthusiasm of all county auxiliaries in the state.

Relaxation was part of our stay as we again had the pleasure of serving as hostesses at the ISMA hospitality suite. More than 500 checkered flags were eagerly sought after by Auxiliary delegates, as well as AMA conventioneers.

It was with great pride that we witnessed the installation of our own Marge Smith of Fort Wayne as North Central regional vice president of the AMA Auxiliary. Not only did she bring honor to herself, her family and her community, but to our Auxiliary and to our state.

I am pleased to have been a member of the delegation representing the ISMA Auxiliary at the national convention. It was a privilege.

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
1128 - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone®

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company

THE JOURNAL, in cooperation with the Division of Continuing Medical Education of the Indiana University School of Medicine, offers its readers a Continuing Medical Education program. This is the 20th in a series produced by the faculty of the School of Medicine and is supported by a grant from its Division of Continuing Medical Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 659.



Management of Penetrating Thoracic Injuries

JOHN L. GLOVER, M.D.
DANIEL K. LOWE, M.D.
PETER B. YAW, M.D.
LEWIS B. OFSTEIN, M.D.
Indianapolis

From the Department of Surgery, Indiana University School of Medicine, Wishard Memorial Hospital, 1001 W. 10th St., Indianapolis 46202.

►►►

MOST PATIENTS who reach the hospital with penetrating wounds of the chest can be managed by tube thoracostomy alone, and those who die at the scene of injury or en route to the hospital usually exsanguinate because of injuries to major vascular structures. Survival rates in the latter group of patients, therefore, should be increased by more rapid institution of treatment.

To test this hypothesis, we examined the records of all patients who required emergency thoracotomy for penetrating thoracic injuries after advanced communications and pre-hospital care became routine. This report describes the protocol we have developed during the last few years for managing such patients and comments about the results of treatment from January 1974 to January 1978.

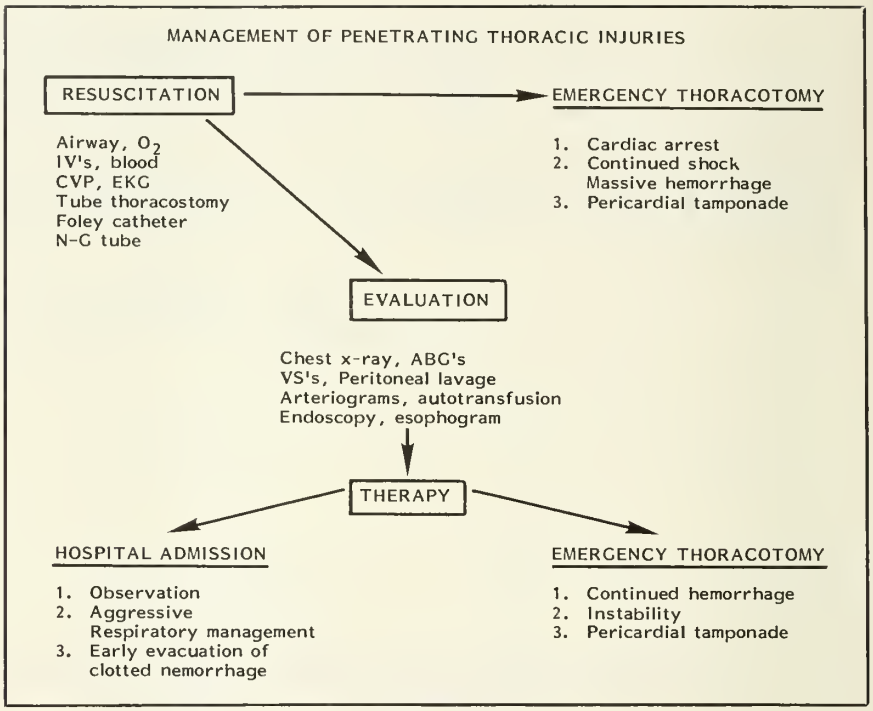


FIGURE 1

COMMENTS ON MANAGEMENT

Our protocol for management of penetrating thoracic injuries *(Figure 1)* consists of three phases: Resuscitation, Evaluation, and Therapy.

Resuscitation: The resuscitative phase begins in the prehospital period when emergency medical personnel give advanced life support measures such as (1) starting intravenous fluids, (2) intubating the trachea, (3) applying "shock pants", and (4) giving medication upon receipt of orders by radio from a physician in the Emergency Department.

Resuscitation in the Emergency Department for penetrating thoracic injuries begins with immediate evaluation of the completely disrobed patient in order to find all the injuries. Recently, for example, a patient had a stab wound *through the cranium* which was not recognized immediately because of virtually no external evidence and because he had a major hemothorax from an obvious chest wound. Specific attention is given to the airway; and respiratory function is ascertained by tidal volume and respiratory excursion, the color of the skin, and later, arterial blood gases. Lactated Ringer's solution is administered intravenously, and blood drawn for crossmatching and for other routine studies such as CBC, electrolytes, alcohol, amylase, PT, PTT, and platelets. A central venous line by subclavian route is begun if the patient has an obtainable blood pressure, and a Foley catheter and nasogastric suction tube are also inserted. A broad spectrum antibiotic intravenously is given for prophylaxis, and efforts are made to obtain history of the injury and any pertinent past medical information.

In a patient with a penetrating thoracic injury and clinical evidence of hemopneumothorax, there is no need to await radiologic confirmation of the diagnosis prior to insertion of a chest tube, particularly with cardiovascular instability! Consequently, tube thoracostomy is done as resuscitation except in the most stable patient. The underwater seal for the chest tube is made with 200 cc. of lactated Ringer's solution to which has been added 1,000 units of heparin so that the blood may be auto-transfused either by suction into a Bentley® transfusor unit and subsequent reinfusion intravenously or by filling sterile blood packs directly from the chest bottle for later infusion as indicated.

Emergency thoracotomy takes precedence over many of the preceding resuscitative measures if cardiac arrest has occurred or is imminent. In such a patient, the skin is rapidly painted with an iodophor solution so that anterior thoracotomy (usually on the left) may be performed for open cardiac massage and control of hemorrhage

PENETRATING THORACIC TRAUMA REQUIRING URGENT THORACOTOMY

WISHARD MEMORIAL HOSPITAL

1974 - 1978

INJURY	TOTAL	MORTALITY	PERCENT
GUNSHOT	21	14	67
KNIFE	41	6	43
TOTAL	35	20	53%

FIGURE 2

or relief of pericardial tamponade. Although we perform pericardiocentesis for suspected tamponade preoperatively in the stable patients, patients who develop cardiac arrest from tamponade always do so because the pericardium is filled with clotted blood for which surgical evacuation is the only successful form of therapy. Although results of emergency department thoracotomy are dismal, it is still indicated occasionally. We recommend transfer of most patients who can be resuscitated to the operating room for thoracotomy if at all possible; but, obviously, the severity of the injury rather than the site where the thoracotomy is performed determines the high mortality. We discourage performance of thoracotomy in the emergency room area in patients who arrive with no signs of life.

Evaluation: The next phase in the management of penetrating thoracic injuries begins by obtaining a roentgenogram of the chest to evaluate the injury in more detail and to determine whether the chest tube is placed appropriately. Vital signs are monitored continuously, as well as blood loss by tube thoracostomy. Further measures of evaluation include arterial blood gases to assess respiration and monitoring of urinary output as a guide to restoration of blood volume. Reinfusion of shed blood from the chest tube can be done at this time.

Peritoneal lavage may be indicated to evaluate intraabdominal injuries, which are very common in patients with blunt chest trauma and multiple fractures. If esophageal injury is suspected, we perform an esophagram as the initial study; on the other hand, if there is a penetrating injury of the neck, endoscopy is done first. With a penetrating thoracic injury in the area of the mediastinum and no massive bleeding or clinical signs of tamponade, we use arteriography rather than surgical exploration to rule out injury of the brachiocephalic vessels. Obviously, if the patient is in an unstable condition, emergency thoracotomy preempts all these studies. When blood is needed immediately, we use type-specific whole blood which can be supplied from the blood bank in five minutes; and all such blood used is subsequently cross-matched. Our experience with autotransfusion has been so satisfactory that we encourage others to investigate its use.

Therapy: In the majority of patients, definitive therapy is implemented when tube thoracostomy is done. Usually there is an initial outpouring of several hundred milliliters of blood which slows dramatically within the first hour. We do not believe that there is a fixed amount of drainage which mandates formal thoracotomy. Many patients drain a liter of blood immediately after placement of a chest tube, only to stop completely in the next hour or two. Thoracotomy in all such patients would undoubtly increase morbidity because of increased loss of blood and unnecessary pulmonary resection.

When the chest roentgenograms show the diffuse haziness or the pleural "peel" indicative of large amounts of clotted blood in the pleural space, thoracotomy will be needed to remove the blood. Although the blood will be absorbed slowly in some patients, we believe that early operative removal of the clotted blood shortens hospital stay, provides earlier return to normal activities, and prevents restriction of ventilatory function from fibrothorax. If necessary, thoracotomy is done in the first day or so; we wait only for the acute bleeding to stop, thus allowing the procedure to be limited to evacuation of the clot.

We usually discontinue broad spectrum antibiotics after 48 hours but occasionally use them until removal of the chest tube, which is done after it has not functioned for 24 hours. Function, in this case, is defined as cessation of air leak and drainage of less than 100 ml. of fluid. There is no point in keeping a tube in the pleural space in hopes that its continued presence will improve the appearance of the chest roentgenogram unless the tube is draining air or a significant amount of fluid. The air leak usually stops within 48 hours; and nearly all tubes can be removed before seven days, the time at which we begin to become more concerned about

the foreign body (the tube) contributing to the presence of infection.

While hemodynamic instability and evidence of cardiac tamponade are clear indications for emergency thoracotomy, the amount of drainage is not reliable enough to provide specific guidelines. Nonetheless, patients who continue to drain more than 150 ml. of blood per hour for several hours usually need operative treatment. Use of central venous pressure is of some help in these patients but can be misleading, since it can be normal or low even when significant tamponade is present.

CLINICAL REVIEW

From 1974 to 1978, we saw 35 patients, five women and 30 men, who underwent thoracotomy for penetrating injuries. Twenty-one were injured by firearms and 14 by knives; the average age was 31 years. All thoracotomies were performed within two hours of arrival except for one done 12 hours later. Twenty of the patients died while in the hospital, an overall mortality rate of 57% *(Figure 2)*. The 15 survivors all made full recoveries except one who had a permanent paraplegia from a gunshot wound of the thoracic spine. Six patients had multiple chest wounds, and one had a shotgun injury to the chest. Patients with thoraco-abdominal wounds or blunt thoracic trauma were excluded in this series, as were those who had thoracotomy in the emergency department but died before reaching the operating suite for definitive treatment.

The mortality rate of gunshot wounds was 66% (14 of 21) while that of knife wounds was 43% (6 of 14). Six patients had immediate thoracotomy in the emergency department because of cardiac arrest, and all six patients died after transfer to the operating room. Of the 29 patients undergoing thoracotomy in the operating room, 14 died, producing a mortality rate of 48%.

OPERATIONS		SURVIVORS	NON-SURVIVORS
CONTROL CHEST WALL HEMORRHAGE		4	--
CONTROL PARENCHYMAL HEMORRHAGE		3	--
LOBECTOMY		4	2
PNEUMONECTOMY		--	4
CARDIORRHAPHY		2	
LIGATION SVC	MAJOR VASCULAR/ CARDIAC REPAIR	1	14
REPAIR SVC		1	
TOTAL	35	15	20

FIGURE 3

All patients who survived the first day of hospitalization left the hospital alive, except for one who died of adult respiratory distress syndrome three days following admission and one who sustained brain death from shock and died on the seventh hospital day. The other deaths were the results of exsanguination.

Although blood pressures on arrival tended to be lower in the nonsurviving patients, no significant statistical correlation could be made. Of the eight patients who had no recordable blood pressures on arrival, only one survived.

Of the 15 survivors, three had suture of pulmonary parenchymal bleeding; and four had chest wall bleeding controlled. Four patients survived pulmonary lobectomy, and two patients had wounds of the heart successfully repaired. One patient each survived innominate vein ligation and repair of the superior vena cava. All four patients who required pneumonectomy died, and the other nonsurviving had major vascular injuries which could not be repaired successfully before death.

Data regarding time of prehospital care were available in 22 patients. The average time for dispatch of the ambulance to arrival at the scene of trauma averaged 4.5 minutes, with a range of 0-12 minutes; average time on the scene was 17 minutes, with a range of 5 to 34 minutes; and time to transport the patient to the hospital averaged 7 minutes, with a range from 2 to 14 minutes. Time from dispatch of the ambulance to arrival of the patient in the emergency department, therefore, averaged 28.5 minutes. Pre-hospital care included intravenous fluid, MAST trousers, airway control, administration of oxygen, and other miscellaneous measures. We found no correlation between survival and pre-hospital care or interval between report of injury and initiation of treatment.

DISCUSSION

It is not surprising that we have not noted an increase in survival in this relatively small series of patients because of the severity of their injuries; and we continue to advocate a system of emergency care in which treatment is begun at the scene of the injury. Since hemorrhage is the lethal factor for these patients, however, we recommend that transportation to the hospital be done without delay in order that definitive treatment—namely, stopping the bleeding—be instituted. Stabilization and control

of hemorrhage go hand-in-hand in patients with intrathoracic vascular injuries, and the time in which treatment can be successful is shortest in those patients with the worst injuries.

Reinfusion of shed blood has been a helpful adjunct, and we urge others to become familiar with techniques of autotransfusion. Also, we still perform thoracotomy in the emergency department in some cases, realizing that it is a costly procedure with a very high mortality rate. Finally, we believe that the uncomplicated recovery of the majority of the salvageable patients justifies our teaching and practicing aggressive surgical treatment of these patients with dramatic and challenging injuries.

BIBLIOGRAPHY

1. Beach PM, Bognolo D, Hutchinson JE: Penetrating cardiac trauma: Experience with 34 patients in a hospital without cardiopulmonary bypass. *American Journal of Surgery*, 131: 411, April 1976.
2. Kish G, Kozloff L, Joseph WL, Adkins PC: Indications for early thoracotomy in the management of chest trauma. *Annals of Thoracic Surgery*, 22:23, July 1976.
3. MacDonald JR, McDowell RM: Emergency Department thoracotomies in a community hospital. *JACEP*, 7: 423, December 1978.
4. Mattox KL, VonKoch L, Beall AC Jr., DeBakey ME: Logistic and technical considerations in the treatment of the wounded heart. Supplement 1 to *Circulation*, 51 and 52, pg. 1-210, August 1975.
5. Oparah SS, Mandal AK: Penetrating wounds of the chest: Experience with 200 consecutive cases. *Journal of Trauma*, 16:868, 1976.
6. Oparah SS, Mandal AK: Operative management of penetrating wounds of of the chest in civilian practice: Review of indications in 125 consecutive patients. *Journal of Thoracic & Cardiovascular Surgery*, 77:162, 1979.
7. Siemens R, Polk HC Jr., Gray LA, Fulton RL: Indications for thoracotomy following penetrating thoracic trauma. *Journal of Trauma*, 17:493, 1977.
8. Symbas PN, Harlaftis N, Waldo WJ: Penetrating cardiac wounds: A comparison of different therapeutic methods. *Annals of Surgery*, 183:377, 1976.
9. Szentpetery S, Lower RR: Changing concepts in the treatment of penetrating cardiac injuries. *Journal of Trauma*, 17:457, 1977.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

Since 1899

THE

MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
Suite 624, 6100 North Keystone Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indianapolis 46220
Northern Indiana Office: Douglas O. Sellon, Representative
120 LaSalle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332

Outpatient Laparoscopic Sterilization With Silicone Rubber Bands

MARTIN T. FEENEY, M.D.
Indianapolis

OVER THE PAST several years female tubal sterilization has become an increasingly popular method of conception control. Currently one of the most popular methods is tubal electrocautery with the aid of the laparoscope. However, on rare occasions this method has been shown to be accompanied by very serious complications.[1-5]

Probably the most feared complication is thermal injury to the small bowel. Because of this, attempts have been made to develop techniques of laparoscopic tubal sterilization utilizing methods other than electrocautery. One of the proposed methods has been the use of silicone rubber bands (Falope rings). There are several reports showing the safety, efficacy and ease of application of these rings.[6-9] The purpose of this report is to detail the author's experience with this technique.

METHODS

All sterilizations were done on outpatients at University Heights Hospital, Indianapolis, Indiana. All patients were healthy females who voluntarily requested sterilization and were interviewed and evaluated. A total of 200 sterilizations were done between June 2, 1976 and August 31, 1978. All patients were operated on by the author. The only patients excluded from the study were those requiring surgery other than tubal occlusion (i.e., hysterectomy, cholecystectomy, etc.).

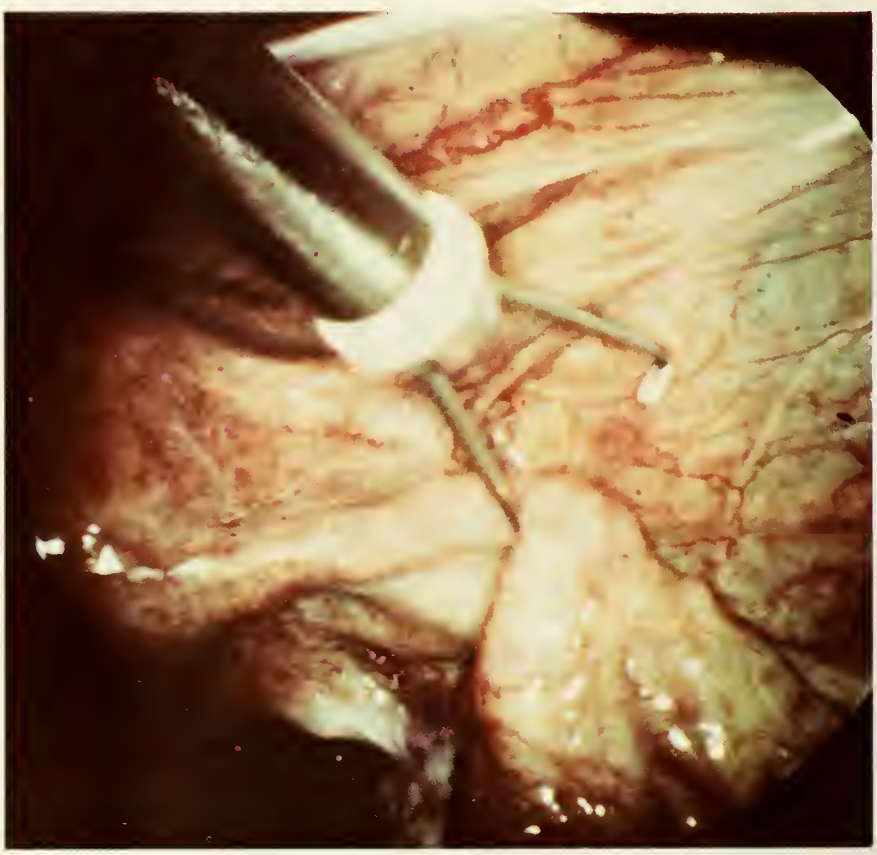


FIGURE 1

The patients were brought to the hospital approximately two hours before surgery, and routine laboratory studies were done. They were then taken to the operating room. General endotracheal anesthesia was administered in all cases. A standard laparoscopy was then performed using the double puncture technique. A Cohen's modified tubal insufflation cannula was used to mobilize the uterus. A pneumoperitoneum was created using 2 to 5 liters of carbon dioxide.

The silicone band is 2.2 mm thick with an inner diameter of 1 mm when unstretched and 6 mm when loaded on the applicator. The technique has been previously described,[10] but certain aspects will be gone over in detail, as they are considered particularly important. The bands are loaded on the applicator with 5% lidocaine ointment. In grasping the Fallopian tube, special care is taken not to grasp any adjacent structures such as the mesosalpinx. The Fallopian tube is grasped approximately 3 cm from the cornual end, and the tube is then retracted into the inner cylinder (*Figure 1*) until the resistance of the outer cylinder is met. The outer cylinder is then utilized to advance the silicone rubber band over the enclosed loop of tube while the entire instrument is advanced slightly to avoid undue stretching of the tube and mesosaplinx. Observation of the loop of tube distal to the ring at this point demonstrates progressive blanching of this section of tube indicating its devascularization (*Figure 2*).

In patients over 30 years of age, an attempt is made to band two loops of tube on each side. It was thought that this may increase the efficacy of the operation. An attempt was made to approximate these rings as close as possible to prevent the occurrence of an intervening occluded portion of tube.

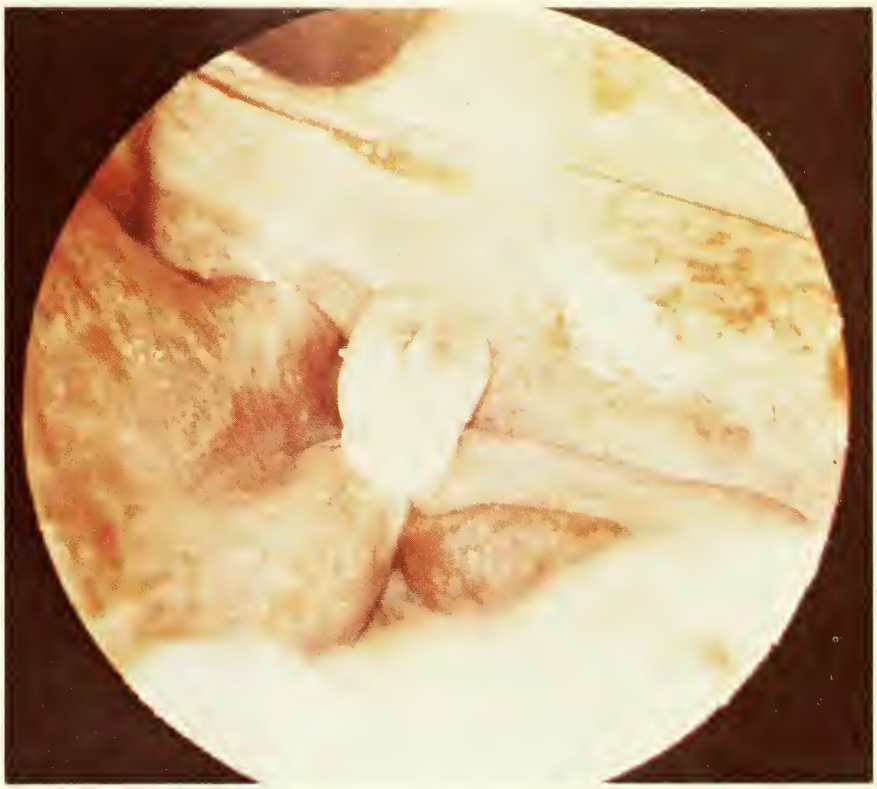


FIGURE 2

Only one ring was applied to each tube in patients under 30 because reconstructive procedures theoretically can be accomplished more readily if more normal tube is available. According to Winston, approximately 90% of patients requesting reversal of sterilization were under age 30 at the time of the sterilization procedure.[11]

RESULTS

The rings were successfully applied in all but three cases. Due to immobility of the tubes in these cases, it was necessary to cauterize one tube. There were no cases in which there was a failed pneumoperitoneum or any case in which a laparotomy was required. All patients but one were released the day of surgery, usually within two to three hours after surgery. This one patient was kept overnight for control of diabetes. All patients were given a prescription for propoxyphene napsylate with aspirin, to be filled if necessary. No patients required stronger pain medication, and all patients were able to return to normal activities in one to three days. To date, there have been no known pregnancies although one patient was pregnant at the time the procedure was performed.

Since this procedure was done, three patients have required pelvic laparotomy for other reasons. At the time of this surgery it was noted in each case that there was a defect in the tube with some fibrosis in the area where the ring had been applied. The ring was adherent to the serosal surface of the tube. In no case where two rings were applied was there any intervening hydrosalpinx.

COMPLICATIONS

By far the most common compli-

cation was tearing of the tube or mesosalpinx during application of the rings, resulting in bleeding. This occurred in eight cases, and in each instance was controlled with the application of additional rings or cautery. Laparotomy was not required in any case. This complication was much more frequent in the early part of this series. As the operator became more experienced, more attention was shown toward not applying tension on the tube or mesosalpinx.

The ring was applied to structures other than the tube in two cases (round ligament and ovarian ligament). This was immediately recognized, and additional rings were applied to the tube. The rings were not removed, and there were no untoward effects. On occasions rings were prematurely ejected. Some of these were retrieved and some not. No complications have occurred from this to date.

The only injury to another structure was a puncture of the bladder with the second trocar in a patient with a previous cesarean section. This occurred even though the bladder had been emptied prior to the procedure. No treatment was required, and the puncture healed without problems.

CONCLUSION

A series of 200 patients have undergone sterilization using Falope rings and the laparoscope. There have been no serious complications to date. This type of operation obviates the feared complication of thermal injury to surrounding structures. In this day of skyrocketing medical costs, performing the operation as an outpatient is certainly feasible and should be considered in all interval sterilization procedures. With the increased use of sterilization for contraception, there will probably be an increased number of requests for reversal. If only one ring is applied to the midportion of each tube, perhaps an end-to-end anastomosis using microsurgical techniques may give a fairly high success rate. However, this is only theoretical since there are no confirming studies to date.

BIBLIOGRAPHY

1. Esposito John M: Burn injury to the bowel during laparoscopic sterilization. *Am J Obstet Gynecol,* 116:887, 1973.
2. Inan M, *et al*: Laparoscopy and some of its hazards. *Del Med J,* 48(2): 71-4, 76, February 1976.
3. Singh KB: Laparoscopic tubal sterilization radiofrequency burns. *Br Med J,* May 14, 1977.
4. Faroqui MO, Bazzoli JM: Complications associated with the laparoscopic tubal sterilization. *Contemp Ob/Gyn,* 5:57, 1975.
5. Levinson CJ, Schwartz SF, Saltzstein EC: Complication in laparoscopic tubal cauterization—small bowel performation. *Obstet Gynecol,* 41:253, 1973.
6. Yoon IB, King TM, Parmley TH: A two-year experience with the Falope ring sterilization procedure. *Am J Obstet Gynecol,* 127:109, 1977.
7. Chatman Donald L: Laparoscopic Falope ring sterilization: Two years of experience. *Am J Obstet Gynecol,* 131:291, 1978.
8. Kumarasamy, Thampu, Hurt W, Glenn: Laparoscopic sterilization with silicone rubber bands. *Obstet Gynecol,* 50:351, 1977.
9. Lalonde André B: Falope ring tubal ligation. *Am J Obstet Gynecol,* 130: 567, 1978.
10. Yoon IB, King TM: A preliminary and intermediate report on a new laparoscopic tubal ring procedure. *J Reprod Med,* 15:54, 1975.
11. Winston RW: Why 103 women asked for reversal of sterilization. *Br Med J,* 2:305, 1977.



McClain Car Leasing, Inc.

1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA

RICHARD H. APPEL, M.D.
Indianapolis

Clinical Notes

Emetine Use of Ulcerative Colitis

ULCERATIVE COLITIS has always been a confusing and an unpredictable disease in regard to cause, treatment and outcome. Because of its clinical appearance, the tendency has been to look for an infective organism. Bargan and others have diligently searched for a possible bacillus or virus as a causative agent, without success.

Diagnosis is relatively easy, since the edematous, pinpoint lesions are usually unique in appearance. Areas of involvement will vary from a small one the size of a silver dollar, to a band-like ring, to others involving widespread areas of much or all of the large bowel.

Because of ignorance of a causative agent, treatment has been hit and miss. As yet, no antibiotic has been of help. Likewise, diet antispasmodics, blood transfusions, etc., have been of no avail. Only sulfas and emetine have dependability. That emetine is so seldom mentioned in the literature is difficult to understand, for it was my mainstay in treating undamaged cases.

Any case of ulcerative c. is unpredictable. Only time gives the whole story. A severe case (judged by symptoms) may react readily to therapy, and an apparently mild case can suddenly turn sour. For this reason, drug therapy rather than surgery should be tried first. In my 40 years of experience, I determined that emetine was the choice.

It has not been possible to compare the relative therapeutic values of the two drugs, emetine and sulfa. Because of the vagaries of the disease in clinical pictures, no standards are possible. And all lab procedures are valueless. My experiences over many years led to the conviction that emetine is the superior drug. One experience involved a school teacher who was treated during the summer months for a mild case, without benefit. Given three grains of emetine, during a three-week period, he recovered completely, only to relapse a year later, and promptly recover after another three-week treatment.

One of the surprises in my practice was finding visible evidence of the disease when mild bleeding was the sole symptom. Since all of these mild cases responded well to emetine therapy, might emetine be used diagnosticly? X-ray in these cases is worthless. Early diagnosis in such cases might prevent severe development of the disease. In private practice it is impossible to maintain control of patients, and follow the course of their disease. I know of several mild cases that reacted favorably to emetine, then relapsed, ending in surgery.

One such case involved a 32-year-old female. She had mild symptoms, which cleared up quickly on emetine therapy. A year later she reappeared with a duplicate condition and response. A third year, the same. She was disgusted with the recurrence, accepted one dose, and disappeared. Two months later, she was referred back to me in serious condition, with marked diarrhea and inanition. She had been in a hospital, under usual treatment, with a downward course. Hospital treatment consisted of transfusions, antibiotics, fluids, etc. Her large bowel was so badly damaged that it was necessary to perform a colectomy. Would a continuation of emetine therapy have prevented this sad outcome?

The woman's only complication with emetine therapy was muscle weakness, which appeared first in the thigh. Administration of the drug was immediately stopped, or reduced. Recovery time was of short duration. Emetine was from 1 to 2 grains per week, depending on the severity of the disease and tolerance. Sub-scapular sites for injection were used, since triceps injections may give undesirable soreness.

Confidence in the value of emetine in the treatment of ulcerative c. increased with the passage of time, and the number treated. During my practice I administered some 250 courses. These were not all separate cases, as many had one or more relapses. As a result of this confidence, I persisted in treatment with emetine, where a novice in its use would have quit. One woman who had had two successful experiences with the drug returned with a second relapse. Because of the previous successful courses, she tolerated treatment, weekly, for three months, without apparent benefit. She was then furloughed, and was not seen until about two years later, at which time she dropped in the office to report that she had been symptom free since shortly after the furlough.

One of the most ridiculous theories is the one that suggests psychiatric states can be causal in ulcerative c. Anyone who has examined the destruction in the large bowel cannot possibly blame it on any form of mental or emotional disorder. The distress generated by the cases of severe ulcerative c. is ample explanation for any personality changes.

SUMMARY

After 40 years, and some 250 separate courses of treatment, I have come to the firm conviction that emetine hydrochloride is the choice drug in the treatment of ulcerative colitis. The sulfas are also of value, but apparently not as effective as emetine. A combination was not tried. Transfusions, fluids, antibiotics, etc., are only mildly supportive at best. All cases, except those with severe bowel damage, should be submitted to drug therapy prior to surgical intervention.

Splenic Artery Aneurysms

A 51-YEAR-OLD Caucasian female was in apparent good health until 3½ weeks prior to admission when she fell in her home, striking her back and left posterior chest. The discomfort persisted; she was seen by Dr. Robert S. Grief and x-rays were taken after physical examination was unremarkable. Routine x-rays revealed a calcified coin-shaped mass in the left upper quadrant suggestive of a splenic artery aneurysm.

The patient's symptoms were thought to be of a musculo-skeletal nature. The possibility of a splenic artery aneurysm was discussed with the patient. She requested further evaluation and, after a short vacation, was admitted to the hospital. She had been told in the past that she was a borderline diabetic; other history included the fact that she was gravida XIV, para VIII.

Physical examination was unremarkable. Laboratory studies were essentially normal except that the VDRL and FTA were positive. (She had been treated in the past.)

An arteriogram revealed a 1.5 cm. splenic artery aneurysm with calcification and apparent filling defect located 6.5 cm. from the origin of the splenic artery. The problem was discussed with the patient and she requested operative management.

A left subcostal incision was extended just to the right of the midline. The lesser sac was entered and the aneurysm, measuring about 1.5 cm. and appearing sacular was palpated at the posterior-superior border of the lateral 1/3 of the pancreas. The splenic artery was carefully dissected and doubly tied with silk ligatures proximal and distal to the aneurysm. The aneurysm was resected. There was some reaction with the surrounding tissue. The spleen was viable. Estimated blood loss was less than 125 cc. A drain was placed. The patient did well and was released seven days postoperatively.

DISCUSSION

Dr. Joseph Morton: Why wasn't the spleen removed? Numerous splenic aneurysms probably never cause any trouble.

Dr. Wiggans: First, the spleen can survive with the splenic artery ligated. The spleen is supplied by more than the splenic artery. The short gastric arteries are the most significant collateral vessels. The spleen is saved because of a syndrome called the Opsi Syndrome (overwhelming post splenectomy infection syndrome). This has become well identified and accepted within the last few years. One of the major reasons for this change has been the extensive review by Singer in 1973. Morris and Bullock

The subject of splenic artery aneurysms was discussed July 13, 1979 during the Peripheral Vascular Conference conducted at St. Vincent Hospital, Indianapolis. (Two ruptured splenic aneurysms with 100% mortality were reported in the Indianapolis area during July.) This report was prepared by Austin L. Gardner, M.D., Indianapolis. Case presentation by John Wiggans, M.D., Vascular Surgery Fellow. (Shortly after the conclusion of this conference, Donald Schwarten, M.D., reported that the splenic artery has been occluded in the past by radiographic techniques.)

in 1919 were first to associate the removal of the spleen with an increase in the susceptibility to infection. King and Shumacker in 1952 stimulated interest concerning Opsi in patients with hereditary spherocytosis.

Splenectomy done at any age and for any reason increases the risk of death due to overwhelming bacterial infection. Post splenectomy infection has a rapid onset and a mortality rate of 50% that distinguishes it from other bacterial infections. The immune aberration following splenectomy includes decreased serum IgM levels, altered serum opsonic function and failure to respond to intravenous antigen challenge.

Thus, the first step in preventing Opsi is to review surgical indications for elective splenectomy and to save the spleen if technically possible in trauma cases and also in splenic aneurysm resection.

Dr. Robert Robinson: What is the incidence and natural history of splenic artery aneurysm?

Dr. Wiggans: Many authors have attempted to indicate the true incidence of aneurysm involving the visceral branches of the abdominal aorta. Aneurysm of the visceral arteries appears to represent 1.5% to 2% of all aneurysms. Splenic artery aneurysms are by far the most common, followed by renal and hepatic. Approximately two-thirds of all reported visceral artery aneurysms are splenic. Reported incidence in autopsy series varies from .03% to .1%, but the age and population study is important. In one series confined to elderly individuals, the incidence was reported as high as 10%. The true incidence is felt to be somewhat higher than that suggested by autopsy series, but visceral artery aneurysms do not represent a large clinical entity.

Dr. Robinson: What is the etiology?

Dr. Wiggans: All visceral artery aneurysms, with the exception of splenic artery aneurysms, are more common in males and are usually arteriosclerotic. Splenic artery aneurysms are two to three times more common in females. Formerly, all were thought to be arteriosclerotic. In females, multiparity has been found in a high incidence. Stanley and Fry, in their review from the University of Michigan, reviewed more than 800 cases. Besides atherosclerosis, causes included fibrous dysplasia, medial degeneration, portal hypertension and arterial hypertension. Less common causes are trauma, mycotic infections, syphilitic infections and, rarely, congenital aneurysms.

Dr. Robinson: What is special about the splenic artery?

Dr. Wiggans: It is the longest and most tortuous of the visceral arteries and subject to the stresses of such a vessel.

Dr. Morton: What is the association with portal hypertension?

Dr. Wiggans: The increased portal pressure results in congestive splenomegaly and might eventually lead to increased flow and pressure.

Dr. Gardner: Can we explain the important association with pregnancy?

Dr. Wiggans: The increased hemodynamic state of local increased pressure, increased intra-abdominal pressure, is felt associated at times with late pregnancy and hormonal changes thought by some to be important. Hormonal activity is really not understood.

Dr. Robinson: What is the importance then of these relatively uncommon aneurysms? Do they rupture?

Dr. Wiggans: Between 25% and 45% of all splenic artery aneurysm ruptures occur during pregnancy, usually during the late third trimester or during labor or postpartum. Multiparity is a definite factor. Maternal mortality is as high as 70% and fetal mortality above 90%. No one really knows the incidence of rupture, but Stanley and Fry felt that the incidence of rupture was 9.1%. The overall mortality with rupture has been reported between 20% and 40%.

Dr. Robinson: Should all these aneurysms be operated upon or might some be observed?

Dr. Wiggans: The conservative view should be to observe if the patient is greater than 60 years of age, if the patient is asymptomatic, and if the aneurysm is small.

Dr. Robinson: What other guide lines are there?

Dr. Wiggans: I feel that each individual case must be thoroughly investigated.

Dr. Gardner: Has anyone in the audience observed a patient with a ruptured aneurysm?

Dr. Thomas Topper, Crawfordsville: A case of ruptured aneurysm of the splenic artery was observed during pregnancy during my residency in Chicago.

Audience: How does one diagnose a splenic artery aneurysm?

Dr. Wiggans: The complaints are usually vague. A palpable mass is uncommon. They are easily found by routine x-rays or by arteriography for some other reason or at exploratory laparotomy. If found at laparotomy, ligation of the splenic artery proximal to the aneurysm might be considered.

Dr. Morton: I wonder if these aneurysms could be treated by arterial embolization?

Dr. Gardner: Dr. Morton's suggestion is excellent and might be applied to many patients. The patients seem to fall into three groups: (1) a group that definitely requires an operation, (2) a group that definitely does not require operation, and (3) a group that needs individual consideration as outlined by Dr. Wiggans.

FUTURE FILE

Impaired Physician Symposium

"The Impaired Physician: A Concern to Colleagues, Family and the Profession" is the subject of a three-hour symposium planned for Jan. 13, 1980 at 1:30 p.m. It will be held during the AMA's 33rd Winter Scientific Meeting in San Antonio, Texas. Rogers J. Smith, M.D. will be the moderator. Dr. Smith, a native of Indianapolis, practices psychiatry in Portland, Oregon, and has been chairman of the three AMA national conferences on physician impairment.

For information, write to Dept. of Scientific Assembly, AMA, 535 N. Dearborn St., Chicago 60610.

ACS National Conference

"Cancer Prevention and Detection" will be the subject of the National Conference of the American Cancer Society April 17-19, 1980 at the Palmer House in Chicago. Cancer causation, prevention and detection will be discussed, with questions invited from the audience. Advance registration is requested. There is no registration fee. Category 1 credit for 14½ hours will apply to PRA and the AAFP.

Write to Nicholas G. Bottiglieri, M.D., 777 Third Ave., New York City 10017.

Health Care Legal Issues

Three timely legal issues affecting the delivery of health care will be discussed Oct. 19-20 during a conference sponsored by the American Society of Law and Medicine (ASLM). It will be held at the Sheraton Washington Hotel in Washington, D.C.

Registration fee, which includes a luncheon on Friday and a bound volume of course materials, is $130 for ASLM members and $150 for non-members. Hotel reservations should be made directly with the Sheraton Washington, 2660 Woodley Road, S.W., Washington, D.C. 20008. Tel: (202) 265-2000.

To register, contact American Society of Law and Medicine, Critical Issues in Health Law, 520 Commonwealth Ave., Suite 211, Boston, Mass. 02215.

Calendar of Events

Sept. 3—Labor Day
Sept. 9—Commission on Medical Services
Sept. 12—13th District, Michigan City
Sept. 13—2nd District, Sullivan
Sept. 19—11th District, Kokomo
Sept. 20—12th District, Fort Wayne
Sept. 22—Executive Committee
Oct. 13-17—ISMA Annual Convention

Asthma and Allergy Seminar

"Asthma and Allergy" is the theme of this year's pediatric seminar sponsored by St. Mary's Medical Center, Evansville. It will be conducted Sept. 20 from 1-5 p.m. at the Center. It has been accepted for four hours of AMA Category 1 credit; the American Academy of Family Practice accepts the seminar for four prescribed hours. Although no fee will be charged, registration is requested.

Guest speakers include Billy F. Andrews, M.D., University of Louisville Medical School; Harvey R. Colten, M.D., Children's Hospital Medical Center, Boston; and Raymond G. Slavin, M.D., St. Louis University Medical Center.

Contact Graduate Medical Education, St. Mary's Medical Center, 3700 Washington Ave., Evansville, Ind. 47750. Tel: (812) 479-4000.

Sexual Abuse Conference

A conference on sexual abuse, sponsored by the Indiana Chapter of the National Committee for Prevention of Child Abuse, will be held in Indianapolis Sept. 16-17 at the Downtown Hilton Hotel.

Registration is $30. Contact the Indiana Chapter, NCPCA, P.O. Box 1226, Columbus, Ind. 47201. Tel: (812) 379-2143.

Physician Computer Course

"Choosing and Using a Computer in a Private Medical Practice" is the subject of a two-day program sponsored by the Chicago Medical School. It will be held Oct. 26-27 at the Marriott O'Hare Hotel, 8535 W. Higgins Rd, Chicago 60631.

Previous knowledge of computer operations is not necessary. Fee for the course, limited to 50 participants, is $195, which includes coffee breaks and lunches. Category 1 credit for 18 hours is assured.

For details, write Dr. Ronnie Beth Bush, 2020 W. Ogden Ave., Chicago 60612.

8-Week Retraining Program

A "Retraining Program for Clinically Inactive Physicians" will be conducted by the Medical College of Pennsylvania from Oct. 15 to Dec. 7 and from April 21 to June 13, 1980. The program is designed to facilitate re-entry of inactive physicians, both M.D.s and D.O.s, into clinical medicine through eight weeks of intensive clinical and didactic experience. The tuition is $1,950.

To apply, write to Office of Medical Education, Medical College of Pennsylvania, 3300 Henry Ave., Philadelphia 19129.

CONTINUED ON PAGE 654

MEDICINE OR BUSINESS?



If you're like most physicians, you're spending more hours working each month before the dollars you earn are your own. Just about everything you need to practice medicine is increasing in cost at an alarming rate.

If you feel you're practicing business instead of medicine, why not consider an alternative? Medicine can still be a great way of life — with reasonable hours, opportunities for specialization, and emphasis on patient care instead of paperwork.

Air Force medicine may be an exciting alternative for your future.

We would like to tell you more — about the 30 days of paid vacation each year, about our opportunities for specialization, and our excellent compensation package.

Contact the nearest Air Force medical recruiter or call 1-800-523-5000 (800-362-5696 in Pennsylvania). We'll answer your questions promptly and without obligation.

AIR FORCE. HEALTH CARE AT ITS BEST.

AIR FORCE

Contact Captain Sam Redding
or MSgt Bob Reese
3919 Meadows Drive
Indianapolis, Ind. 46205
Phone: (317) 269-6164 Collect

FUTURE FILE

CONTINUED FROM PAGE 652

Blood Pressure Conference

A national conference on the "Current State of the Art in High Blood Pressure Control Applied to Rural Communities" will be conducted by the South Carolina Heart Association Oct. 25-27 in Myrtle Beach, South Carolina. Category 1 credit for 14 contact hours are offered.

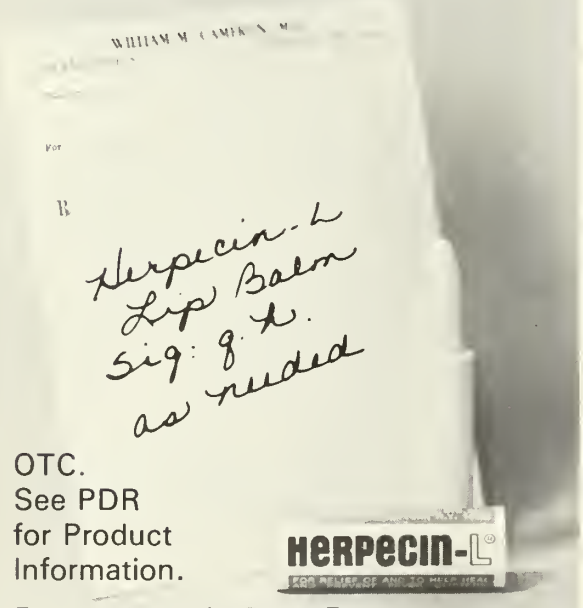
Write to Mrs. Georgia L. Wingard, Division of Chronic Disease Control, 2600 Bull St., Columbia, South Carolina 29201.

Alcohol and Drug Abuse

A "Seminar Series on Alcohol and Drug Abuse" will be conducted by the University of Illinois at the Medical Center in Chicago Oct. 12-13. AMA Category I credit is 12 hours.

For more information, contact the Office of Continuing Education, 1853 W. Polk St., Room 144, Chicago 60612. Tel: (312) 996-8025.

Dx: recurrent herpes labialis



OTC.
See PDR
for Product
Information.

For samples, write Dept. F at:

CAMPBELL LABORATORIES, INC.
P.O. Box 812, FDR, N.Y., N.Y. 10022

"Herpecin-L" Lip Balm is available at all Haag Drug Stores and other select pharmacies.

Louisville Pediatric Lecturer

The Louisville Pediatric Lecturer this year will be Doctor Professor Petter Karlberg of Goteborgs, Sweden. The lectureship will be held Oct. 31 at 11 a.m. in the Health Sciences Auditorium, Abraham Flexner Way, Louisville.

The Annual Newborn Symposium will be held at the same location Nov. 1-3 in commemoration of "The International Year of the Child." Doctor Karlberg and many other outstanding speakers will appear.

Contact Billy F. Andrews, M.D., University of Louisville School of Medicine, P.O. Box 35260, Louisville 42032. Tel: (502) 588-5753.

Postgrad Course in Milwaukee

The Medical College of Wisconsin in Milwaukee will conduct its 13th annual postgraduate course in Gynecological Pathology, Cytogenetics and Endocrinology Jan. 3-9, 1980 at the Pfister Hotel and Tower, Milwaukee.

The six-day course has been extended to include a complete up-to-date review of endocrinology and cytogenetics. It is limited to 150 registrants. A $450 enrollment fee will include 68 selected 35 mm slides. The fee is non-refundable. Approved for 55 cognate hours with ACOG and 43 hours in Category 1 for the PRA.

Write to Richard F. Mattingly, M.D., 8700 W. Wisconsin Ave., Milwaukee, Wis. 53226.

Polytomography of the Temporal Bone

The 21st two-day symposium on Polytomography of the Temporal Bone will be given under the auspices of The Wright Institute of Otology at Community Hospital, Indianapolis, Oct. 20-21. Participation meets the criteria for 12 AMA Category 1 credit hours. Fee for the course is $250.

Subjects include: Basic Anatomy of the Temporal Bone, Technique of Polytomography of the Temporal Bone and Pathological Conditions Revealed by Polytomography.

Contact The Wright Institute of Otology, Inc., Community Hospital of Indianapolis, 1500 N. Ritter Ave., Indianapolis 46219. Tel: (317) 353-5679.

Richter Lectureship

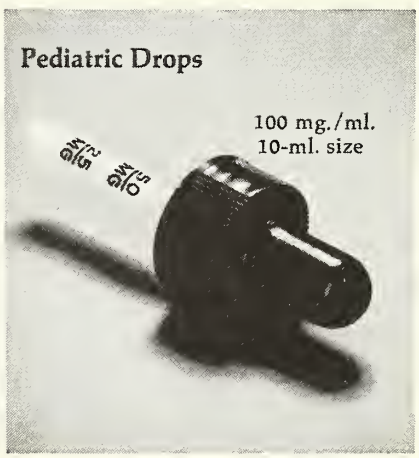
The 5th annual Arthur B. Richter Lectureship will be held Oct. 10-11 at St. Vincent Hospital and Health Care Center, Indianapolis, the sponsor. Guest lecturer will be William C. Roberts, M.D., chief of the Pathology Branch, DHEW. The course is approved for six hours of AMA Category 1 credit.

For details, contact Mrs. Jane Boyle, Medical Affairs, St. Vincent Hospital, 2001 W. 86th St., Indianapolis 46260. Tel: (317) 871-2169.

easy to take







Keflex®
cephalexin

Lilly

Additional information available to the profession on request.
Eli Lilly and Company
Indianapolis, Indiana 46206

500738

ALDORIL®
ALDORIL®
ALDORIL®

containing methyldopa and hydrochlorothiazide

TABLETS
ALDORIL®-25
containing 250 mg ALDOMET® (Methyldopa, MSD)
and 25 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL®-15
containing 250 mg ALDOMET® (Methyldopa, MSD)
and 15 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL® D30
containing 500 mg ALDOMET® (Methyldopa, MSD)
and 30 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL® D50
containing 500 mg ALDOMET® (Methyldopa, MSD)
and 50 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

Merck Sharp & Dohme, Division of
Merck & Co., Inc., West Point, PA 19486

MSD
MERCK SHARP & DOHME

Copyright © 1979 by Merck & Co., Inc

J9AR13

Quinamm™

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS: For the prevention and treatment of nocturnal recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis, and static foot deformities.

CONTRAINDICATIONS: Because of the quinine content, Quinamm is contraindicated in women of childbearing potential, in pregnancy, in patients with known quinine sensitivity, and in patients with glucose-6-phosphate dehydrogenase deficiency. Hemolysis (with the potential for hemolytic anemia) has been associated with a G-6-PD deficiency in patients taking quinine.

PRECAUTIONS: Thrombocytopenic purpura may follow the administration of quinine in highly sensitive patients. Recovery will follow withdrawal of the medication.
Cinchona alkaloids, including quinine, have the potential to depress the hepatic enzyme system that synthesizes the vitamin K-dependent factors. The resulting hypoprothrombinemic effect may enhance the action of warfarin and other oral anticoagulants.

ADVERSE REACTIONS: Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. If ringing in the ears, deafness, skin rash, or visual disturbances occur, the drug should be discontinued.

DOSAGE AND ADMINISTRATION:
1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

Product Information as of September, 1977

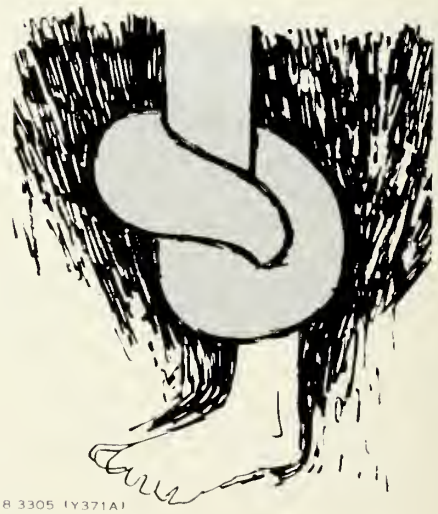
U.S. Patent 2,985,558

Merrell

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell™



8 3305 (Y371A)



Quinamm™

each tablet contains quinine sulfate 260 mg., aminophylline 195 mg.

specific therapy for painful night leg cramps

Nocturnal recumbency leg muscle cramping is frequently an unwelcome bedfellow for many patients—especially those with arthritis, diabetes or peripheral vascular disease... consider Quinamm... simple, convenient dosage—usually just one tablet at bedtime... can provide restful, welcome sleep without night leg cramps.

See opposite page for prescribing information.



Does it influence your choice of a peripheral/cerebral vasodilator*?

- Vasodilan—compatible with coexisting diseases
- Vasodilan—compatible with concomitant therapy
- Vasodilan—compatible with your total regimen for vascular insufficiency

*Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
Vasodilan injection, isoxsuprine HCl, 5 mg., per ml

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily
Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions

Contraindications and Cautions: There are no known contraindications to or use when administered in recommended doses. Should not be given immediate postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension tachycardia

Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose. Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose. Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls

U S Pat. No. 3,056,836

VASODILAN®
(ISOXSUPRINE HCl)
20-mg tablets

Mead Johnson PHARMACEUTICAL DIVISION

© 1978 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U S A. MJL7-426

Penetrating Thoracic Injuries

CONTINUED FROM PAGES 641-645

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: Indiana University School of Medicine, Division of Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46223.

1. Initial resuscitative measures for the patient with penetrating thoracic trauma include
 a. Immediate evaluation—pertinent available history, vital signs, and physical examination of the disabled patient.
 b. Airway management with supplemental O_2.
 c. Fluid replacement including MAST trousers.
 d. Tube thoracostomy in the unstable patient.

2. Emergency thoracotomy may need to be performed in patients with penetrating thoracic trauma when
 a. Cardiac arrest has occurred or is imminent.
 b. Pericardial tamponade occurs.
 c. Massive hemorrhage with hemodynamic instability is present.
 d. Continued hemorrhage occurs from the tube thoracostomy at an increasing rate or rate greater than 150 ml. per hour for several hours.

3. Patients with penetrating thoracic trauma treated with the tube thoracostomy who do not require emergency thoracotomy
 a. May need peritoneal lavage to evaluate damage in the abdomen.
 b. May need endoscopy and/or an esophagram to evaluate possible esophageal injury.
 c. Never need arteriograms.
 d. May need thoracotomy later for evacuation of a clotted hemothorax.

4. In patients treated with tube thoracostomy for hemopneumothorax, which of the following conditions must be met before the tube is removed?
 a. Cessation of air leak.
 b. Drainage of less than 100 ml. of fluid daily.
 c. Resolution of any evidence of clotted blood on chest roentgenogram.
 d. Resolution of any atelectasis which was present initially.

5. Which of the following applies to patients found hypotensive at the scene of a penetrating thoracic injury?
 a. The hypotension is due to neurogenic shock in 50% of cases.
 b. Thorough stabilization, including starting intravenous fluids, taking an EKG, and immobilization of the cervical spine, should be done before transport to the hospital is begun.
 c. Central venous pressure should be recorded as soon as possible because it is the most reliable indicator of pericardial tamponade.
 d. Hemorrhage is the factor most likely to cause the patient's death.

The following are answers to the CME quiz that appeared in the August issue of THE JOURNAL. The article upon which the questions were based was "Urinary Tract Infections in Childhood," by Eric Yancy, M.D.

1. a	6. b
2. a	7. c
3. c	8. a
4. d	9. b
5. d	10. c

Answer sheet for Quiz: (. . . Thoracic Injuries)

1. a b c d
2. a b c d
3. a b c d
4. a b c d
5. a b c d

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in the next issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before Oct. 10, 1979, to the address appearing at the top of this page.

BOOK REVIEWS

The Cellular Basis of Mammalian Reproduction

Jonathan Van Blerkom, Ph.D., Dept. of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder; and Pietro Motta, Ph.D., Dept. of Anatomy, Faculty of Medicine, University of Rome, Rome, Italy. Copyright 1979, Urban & Schwarzenberg, Baltimore-Munich. Hard-cover, 247 pages, plus index, with 235 electron micrographs on 85 plates, $29.50.

This opus must be seen to be appreciated, since the numerous and wonderful illustrations are the foundation of the book. Three techniques have been used in their production, resulting in scanning electron micrographs, transmission electron micrographs and conventional light micrographs. The plates each contain from one to five different micrographs, with a scattering of stereo views, arranged for viewing with the unaided eye. Magnifications up to 57,000 diameters are shown, but the greater number of illustrations are shown at 3,000 to 12,000. Some plates depict tissue at 220 diameters on up through the hundreds to the thousands. This is certainly an effective method of presentation, greatly increasing ease of comprehension.

The text is well written, up-to-date, and replete with references. In addition, the arrangement is sytematic and easily followed. A list of the chapters serves to illustrate the method of presentation:

1. The Ovary Prior to Ovulation.
2. The Ovary and Ovulation.
3. The Related Ducts.
4. Physiological and Morphological Aspects of Spermatozoa Leading to the Attainment of the Capacity to Fertilize an Oocyte.
5. Fertilization and Preimplantation Embryogenesis.

While this work has been done on animal organs and tissues, human beings are mammals, too, and comparisons between the animal and human mechanisms are scattered through the discussions. The methods used in this research represent the present day *ne plus ultra* in technology, but use and understanding thereof are not beyond the range of a modern medical student. Therefore, I would heartily recommend it as an adjuvant for study by anyone studying and/or concerned with human reproduction, whether student, professor or physician. The gynecological pathologist should be interested in the minute structure revealed by the electron micrograph, in connection with understanding the pathogenesis of cancer, as for example the myriad microvilli of and invaginations in the ovarian surface epithelium. This finding fits well with J. Donald Woodruff's recent views on the pathogenesis of ovarian neoplasia.*

For this reviewer, such knowledge reduces the mystery of mammalian reproduction by a certain amount, but it increases the wonder of it. Institutions of medical learning should certainly have this book on their library shelves.

A. W. CAVINS, M.D.
Gynecologist
Terre Haute

*Woodruff JD: The Pathogenesis of Ovarian Neoplasia. *Johns Hopkins Med J.* 144:117-120, 1979. (This has 12 references.)

JOURNAL ON MICROFILM

Microfilmed copies of current as well as all back issues of THE JOURNAL are available through University Microfilm Services, a subsidiary of Xerox Corporation. The 35 mm film fits all standard viewers and provides THE JOURNAL in miniature at a savings on binding and storage costs. Write for information or send orders direct to University Microfilm Services, 300 North Zeeb Road, Ann Arbor, Mich. 48106.

BOOK REVIEWS

Handbook of Critical Care Medicine

Edited by Max Harry Weil and Robert J. Henning. Copyright 1979, E. M. Book, New York. 205 pages, with illustrations, $19.95.

(Note: The reviewer presents a comparative analysis of both the 1978 and 1979 editions of this book. The 1978 edition contained 558 pages and was published by Symposia Specialists Medical Books, Miami.)

Intermingling and erasing traditional disciplinary frontiers, these two hand books update many topics relevant to the care of seriously ill patients. Both arise from large, recent critical-care symposiums. Both manuals duplicate three excellent chapters: Swan's on cardiac output and Turner's chapters on radiographic diagnosis and therapy in thoracic and abdominal emergencies. Sometimes one volume provides a better discussion of similar topics: The 1979 version, for instance, prevails regarding colloid osmotic pressure, neurologic monitoring and septic shock.

Both emphasize shock pathophysiology, diagnosis, and therapy. And both agree that early circulatory shock is characterized by an uneven distribution of blood flow. The practical, 1979 section on how to use fluid challenges also comments on that rarely discussed phenomenon where the CVP and P.A.W.P. actually fall after volume administration. Virgilio, in the 1978 text, justifies the position of those who feel that albumin resuscitation is being overutilized. In this regard and elsewhere, the editors tolerate viewpoints divergent from their own. Indeed, contributions that provide complementary and contrasting information are purposely included wherever they are deemed useful to the clinician-reader.

Numerically, the 1978 handbook reviews more topics—some of the best cover neurological crises and how to ameliorate brain damage by barbituate loading, reflow promotion, and prophylactic controlled hyperventilation. The 1979 edition contains outstanding sections on cardiovascular crises, e.g., surgical therapy for recurrent tachyarrhythmias, prosthetic valve dysfunction, and the management of low cardiac output after cardiac surgery. Essays that examine commonly unquestioned concepts, like whether "warning arrhythmias" are the only indication for lidocaine therapy after myocardial infarction, also serve to open the eyes of those who would otherwise perpetuate the status quo.

In summary, these two books illuminate the continuum of techniques by which life-threatening illnesses and injuries may be more readily diagnosed and effectively managed.

ALAN T. MARTY, M.D.
Evansville
Cardiovascular Surgeon

Principles of Clinical Electrocardiography, 10th Edition

Mervin J. Goldman, M.D. Copyright 1979, Lange Medical Publications, Los Altos, Calif. 415 pages, $12.

This edition is another entry in the Lange Medical Publications "concise medical library for practitioner and student." As in previous editions, the volume presents the basic concepts of electrocardiography and their clinical application. Since the book represents an introduction to electrocardiography, it contains several chapters on fundamentals and emphasizes basic electrophysiologic principles throughout the text.

In this edition, major revisions were made in the sections relating to exercise tests and preexcitation syndromes. The book is generously illustrated and presents useful tabular material on the endpapers. Your reviewer enthusiastically recommends it for medical students, physicians, and members of the allied health sciences who desire a basic working knowledge of electrocardiography.

W. D. SNIVELY, JR., M.D.
Evansville
Internal Medicine

BOOK REVIEWS

Atlas of Radiologic Anatomy, 2nd Edition

Lothar Wicke, with assistance of Wilhelm Firbas and Roland Schmiedl. Translated from German by Allan L. Rice, Ph.D. Translation for this edition of the figure labels by Prof. Dallas R. Boushey and Patricia P. Krupp, Dept. of Anatomy, University of Vermont College of Medicine. Copyright 1979, Urban and Schwarzenberg, Inc., Baltimore-Munich. Printed in Germany. 219 pages, plus index, with 117 radiographs and 118 line drawings. $17.50 hard cover.

This is another beautiful book published by Urban and Schwarzenberg with clearly detailed plates in black and white. The authors state: "The original radiographs were electronically contrast enhanced and converted into positives for use in the book, since only in this form do we feel the best detail is to be captured. The disadvantage, namely that the radiographs do not appear as negatives, the way radiologists see them in practice, is outweighed in our opinion by the picture quality." I am inclined to agree.

The radiographs are presented on the right-hand (odd numbered) page, while directly across, on the left-hand page, is an explanatory line drawing, the same size as the radiograph, containing all the labeling, etc. Thus the radiograph is presented entirely clear and uncluttered except for one or two instances where a small black arrow is used. I find this system not only pleasing to the eye but also a valuable learning device since the act of carrying the label and its guide line *in the mind* from one page to the other increases comprehension of the anatomical relationships.

The x-ray "projections are named in the usual fashion, indicating the orientation of the part of the body closest to the film," and in addition a list is supplied on page 9 of the most important directional indications. In addition to this, most of the line drawings are accompanied, in a corner of the page, by a miniature drawing of the patient in relation to the film, with an arrow showing the direction of the x-rays.

I think there is an error in labeling Fig. 65, p. 115, which should read "right side" instead of "left side." There is another, two pages beyond, labeled "left side" which appears to *be* the left side. These are bronchograms showing such exquisite detail that the error is overshadowed.

This book should be of value to any practitioner of medicine, not only to keep himself alert to exact anatomical relationships (in a very time saving manner), but also to use as a handy, authoritative means of explaining the human body to patients.

A. W. CAVINS, M.D.
Terre Haute
Gynecologist

The CIBA Collection of Medical Illustrations, Vol. 7

Volume 7, "Respiratory System," by Frank H. Netter, M.D. Copyright 1979, CIBA Pharmaceutical Company, Division of CIBA-GEIGY Corp., Summit, N.J. 340 pages with 273 full color illustrations, $39.50.

This 10x13-inch, well printed volume should be treasured by anyone lucky enough to own a copy. Surely it will become a family heirloom! It is really pointless to expatiate on the treasures contained; no sense in gilding the lilly. Examine it yourself and only then make your own judgment.

(Ed. Note: Each color illustration is accompanied by an in-depth descriptive text. The book features a comprehensive index and an extensive bibliography. It features liberal use of x-rays, including radiographic scanning and tomography, as well as light photomicrographs and scanning electron micrographs add a new dimension to Dr. Netter's talents. The book is organized into five major sections: Anatomy, Physiology, Roentgenologic Examination of Lungs, Diseases and Pathology, and Diagnostic and Therapeutic Procedures.)

ARNOLD LIEBERMAN, M.D.
Ocala, Florida

BOOK REVIEWS

Respiratory Physiology—The Essentials, 2nd Edition

John B. West. Copyright 1979. Williams & Wilkins, Baltimore. 182 pages with illustrations.

Perhaps the first step in wanting to learn more about pulmonary physiology is to realize that one's present understanding is still full of gaps. For busy physicians and over-burdened students, the next and most enjoyable step is to read this maestro's recital. Although his new edition is three pages shorter than the already succinct old one, Professor West again succeeds in explaining the mysteries of gas exchange without resorting to overcondensation. How he so easily communicates complex concepts involves, in part, his ability to use metaphor and simile. For example, he describes the pulmonary capillary bed "as a sheet of blood flowing interrupted in places by posts, rather like an underground parking garage."

The section on ventilation-perfusion relationships has been pruned, while that on metabolic functions of the lung has grown. The essays on ventilatory control and on the now precarious way that Starling's law of the capillary is applied to the lung have been largely rewritten. New words, like the "Kilopascal"—a unit of pressure in the Systeme Internationale equal to 7.5 mm Hg—are defined. And throughout, the introductory descriptions of certain phenomena are carefully identified when they are not completely accurate. For instance, after discussing carbon monoxide diffusing capacity, the next paragraph points out that the term "transfer factor" would be better, and goes on to explain why the measurement does not solely reflect the diffusion properties of the lung.

As such, this brief monograph aims at para medical personnel as well as physicians. Indeed, all who need a modern understanding of how the lung works will find this text the best place to start.

ALAN T. MARTY, M.D.
Evansville
Cardiovascular Surgeon



NEWS NOTES

National Antivenin Index

Practically all of the exotic antivenin (serum) available in the U.S. is located at major zoological parks. The Antivenin Committee of the American Association of Zoological Parks and Aquariums (AAZPA), in cooperation with the Oklahoma Poison Control Center, publishes a National Antivenin Index. The Index for 1978/1979 may be obtained at $3 per copy by writing to the Oklahoma Center at Oklahoma Children's Memorial Hospital, P.O. Box 26307, Oklahoma City, Okla. 73126. Index information regarding venomous snake bite and the location of antivenin is accessible 24 hours a day at the Center at (405) 271-5454.

VA Clinical Training

VA medical centers in one year provided 97,272 persons with some of their clinical training. Nearly one-third of this group consisted of medical students. The VA is affiliated with nearly 1,000 educational institutions, including 104 medical and 58 dental schools. Other than medical students, those individuals receiving training included 37% of the physicians filling approved medical residencies, 19% of all dentists in postdoctoral training, and 11% of nursing students.

PHYSICIANS

Assistant Director Associate Director

Ann Arbor, Michigan

Excellent opportunity to join our progressive Clinical Research staff at the Assistant or Associate Director level. As a Clinical Research physician, you would plan, design, implement and direct clinical research programs for the evaluation of new drug entities. To assist you, we have excellent support personnel, including field representatives, librarians, biostatisticians, writers and systems analysts.

Work environment affords the opportunity to keep current in a variety of therapeutic areas and to exchange information with colleagues. Our modern well-equipped facilities, located adjacent to the University of Michigan campus, were designed exclusively for research and development.

Positions require an M.D. degree with board certification or board eligibility in one or more of the following specialties: internal medicine, cardiology, infectious diseases, or psychiatry. Previous experience in pharmaceutical industry useful, but not required. We offer an attractive salary-benefits package.

To further explore these professional career opportunities, please forward Curriculum Vitae, in strict confidence to:

D.J. Garber
Warner-Lambert
Pharmaceutical Research Division
2800 Plymouth Road
Ann Arbor, Michigan 48105

An Equal Opportunity Employer M/F

Warner-Lambert



Dr. Steen Elected Chairman of AMA Board

Dr. Lowell H. Steen of Hammond, a member of the AMA Board of Trustees since 1975, was elected chairman of that board during the AMA's annual convention in Chicago in July.

He is the first Hoosier physician ever to hold that position in the nation's largest medical organization.

Very active at the AMA level since 1969, Dr. Steen has championed the philosophies and policies of the individual practicing physician and organized medicine at every level. He is a former ISMA president and a former chairman of the ISMA Board of Trustees. He is a life trustee of the Lake County Medical Society.

One of his goals is that the AMA continue to attract new members. "It is important that we have unity in the profession, and a strong Association that continues to resist encroachments on a physician's freedom to practice medicine," he said.

Dr. Steen is a 1948 graduate of the Indiana University School of Medicine. He practices at the Whiting Clinic in Hammond, and he is a clinical instructor at the Stritch School of Medicine at Chicago's Loyola University.

HEW's Drug Cost Control Program

"Federal Control of Pharmaceutical Costs: The MAC Experience" is the title of the first major study on the HEW Drug Cost Control Program. The study was funded by Roche Laboratories and was conducted by Professors Jean-Paul Gagnon and Raymond Jang of the University of North Carolina.

The authors point out that, whereas originally projected savings were estimated at $48 million, predicted specific savings are now estimated by three different staff members of HEW as $20, $17, and $10 million. They also think the "Guide to Prescription Drug Prices," a reference book for the program, should include information on actual prescription costs to the patient. Further, they are uncertain about the status of drug interchangeability.

A copy of the full study may be obtained by writing to Health Issues, P.O. Box 1115, Radio City Station, New York City 10019.

NEWS NOTES



GIFT FOR THE RITCHEY CHAIR—Showing a check for $29,500, presented by the Levey Medical Memorial Foundation toward the J.O. Ritchey Chair of Medicine, are Dr. George T. Lukemeyer (left), Dr. J. O. Ritchey (center) and Dr. Robert D. Pickett. In the background is a portrait of Mrs. Meta Levey, whose gift to the Marion County Medical Society led that organization to form the Levey Foundation in 1954. Dr. Ritchey, the "dean of Indiana physicians," was a member of the I.U. School of Medicine faculty for 40 years, 25 of them as head of the Department of Medicine; he is presently chairman of the school's admissions committee. Dr. Lukemeyer is chairman of a national committee organized by the I.U. Foundation to raise $1 million to endow the Ritchey Chair. Dr. Pickett is president of the Levey Foundation.

IUPUI PHOTO

Administrative Scholars Program

The Veterans Administration is sponsoring a special program to prepare outstanding individuals to assume leadership roles within the health care system. It is called the VA Administrative Scholars Program and is open to all qualified individuals from health and health-related professions.

Each year five persons are selected for enrollment in the program, which provides a minimum two-year opportunity for mid-career health professionals. Financial support equals present compensation up to the limit of the Office of Personnel Management scale. Program content is largely determined by the scholars, who create their own self-directed plans dealing with major health care issues.

The program has been in operation two years, with 10 scholars currently in residence. A third class will begin this month. Applications are now being solicited for the 1980 program year; due date is Nov. 1. Contact the VA Department of Medicine and Surgery, Washington, D.C. 20420.

National Health Insurance

The Senate Finance Committee has heard sponsors of several bills on national health insurance and has a tentative schedule for considering the issues. It is reported that the committee has tentatively agreed as follows:

- To create a catastrophic program with a single fixed dollar amount per year as the deductible. Under this plan the insured could choose to pay the expenses from personal funds or by insurance;
- To make the catastrophic deductible amount "dynamic," that is, the amount would fluctuate as medical care prices rose or fell;
- To mandate the catastrophic health insurance program coverage to be at least as broad as the Medicare program.

Senator Russell Long (D-La.), committee chairman, disagrees with the all-inclusive plans of Senator Kennedy and the Administration. Sen. Long says, "Except for possible fine tuning of these catastrophic and Medicaid programs, there should be no presumption whatever that other, more ambitious, programs will follow."

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Order now for early delivery on 1980 models.

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
Telephone 614-228-1701 or
317-472-3594

NEWS NOTES



DON'T YOU JUST LOVE FOUR-WHEELING?



THE INDIANAPOLIS BALLET THEATRE will perform Michael Lichtefeld's A Suite Jelly Roll, **a jazz-dance oriented program in the style of the 1920s, during an evening at Indianapolis' Beef-N-Boards theater, Monday, Oct. 15. The theater will be the site of a private gourmet evening for ISMA members and guests attending the annual convention. Reservations will be required.**



The value of early fitting

Research has proven the fitting of prostheses on children should be accomplished as early as is practicable. It has only been a few years since the child amputee was not considered ready until just before pre-school age or even later. Extensive experience demonstrates that fitting at a much earlier age produces more effective results.

If there are no complicating factors, children with arm amputations usually should be provided with a passive type of prosthesis soon after they are able to sit alone, generally at about six months of age. Lower-extremity child amputees should be fitted with prostheses as soon as they show signs of wanting to stand. The development of muscular coordination of child amputees is the same as for non-handicapped children; and, therefore, this phase may take place as early as eight months or as late as 20 or more months.

For more information, please write to:

Hanger PROSTHESES

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807

Insurance Survey Results

The ISMA Board of Trustees, at their July 15 meeting, endorsed Resolution 79-4 (See Page 680), which will authorize ISMA to form a for-profit life insurance company if approved by the House of Delegates next month.

Their action was taken after hearing the results of the insurance survey, which shows that ISMA members support the formation of a life insurance company 2-to-1. Some 33% of the surveys were returned.

Of the 66.7% who favor forming the company, more than 50% said "yes" to purchasing stock, while another 20% said "yes, maybe."

Fifty-eight per cent said they would support offering the insurance programs to other allied health professionals and 27% said "no."

Physicians from 78 of the 81 county medical societies responded to the survey. Final results will be presented to the reference committee and House of Delegates.

NEWS NOTES

THE ARBORS, popular night club quartet and recording artists, will entertain ISMA conventioneers during the President's Dinner, Tuesday, Oct. 16, at the Sheraton West Hotel, Indianapolis. The Arbors, equally at home with barbershop, glee club and contemporary music, are best known for their TV jingles, "Fly the Friendly Skies of United," "Valley of the Jolly Green Giant," and "You Can Trust Your Car to the Man Who Wears the Star."



Here and There . . .

. . . **Dr. Paul J. Kirkhoff** of Indianapolis has been named Community Hospital's Physician of the Year for his contribution to the education of medical students, residents and graduate physicians.

. . . **Dr. John F. Moe** of Indianapolis has been elected president of the American Heart Association, Marion County Chapter, Inc.

. . . **Dr. Paul M. Inlow** of Shelbyville and **Dr. Donald S. Chamberlain** of Mishawaka have been named Fellows of the American College of Radiology.

. . . **Dr. George F. Rapp** of Indianapolis has been reappointed by the Governor to a four-year term on the State Law Enforcement Training Board.

. . . **Dr. Kirk R. Wilhelmus,** son of former ISMA president **Dr. Gilbert M. Wilhelmus** of Evansville, has received a Fellowship in Corneal Disease at Moorfields Hospital, London, England. The fellowship is sponsored by the International College of Surgeons and the Royal Society of Medicine.

. . . **Dr. Terry L. Nofziger** has been elected president of the medical staff at Orange County Hospital. **Dr. Charles X. McCalla III** is vice-president, and **Dr. Wallace A. Shellenberger** is secretary. All three physicians are from Paoli.

. . . **Dr. Owen H. Lucas** of Chesterton has been named a diplomate of the American Board of Family Practice.

. . . **Dr. John Beeler** of Indianapolis has been reappointed by the Governor to a three-year term on the State Protection and Advocacy for the Developmentally Disabled Commission.

. . . **Dr. Frank P. Lloyd** of Indianapolis has been elected as one of five directors of the Indiana State Chamber of Commerce.

FOR SALE
Doctor's Home
Country Setting



Set amidst five wooded acres, this beautiful country home possesses many luxurious features: 5 bedrooms, 5 baths, formal dining room with Spanish decor; living room is Victorian and family room is Early American. Family room and living room have back-to-back fireplaces. Huge country kitchen with custom-built cabinets, range that charcoals, and double self-cleaning ovens. Master control lighting system. Expensive, sophisticated security system. Maid quarters, small green house, 3 recreation rooms, drive-through garage with electric door openers. Many other outstanding features.

This house is located in a small east central Indiana community of 8,000, yet it is within 20 minutes driving time of hospitals in Muncie, Anderson and New Castle. If you are interested in this opportunity for success in a smaller community, please contact: Larry Howell, RAINTREE REALTY, INC., 311 Parkview Dr., New Castle, Ind. 47362. Tel: (317) 529-1100.

NEWS NOTES

'Advances for Medicine'

Hewlett-Packard has a new publication, "Advances for Medicine," which offers news and information on medical instrumentation and services offered by Hewlett-Packard. Forthcoming issues will carry articles about the measurement of physiological data in new and improved ways, achievements in saving time, labor and equipment costs, and the utilization of data processing tools for more efficient hospital management.

Address inquiries to: Inquiries Manager, Hewlett-Packard Company, Medical Products Group, 175 Wyman St., Waltham, Mass. 02154.

Lilly Expands Facilities

Eli Lilly and Company has announced several building projects that will increase its drug manufacturing facilities.

A chemical manufacturing unit at Clinton, Ind., will be expanded at a cost of $67 million. The Tippecanoe Laboratories at Lafayette, Ind. will be expanded for the manufacture of chemicals and Treflan® at an expenditure of $70 million. Dista operations for fermentation will be improved at Speke in the United Kingdom for $17 million. Building already under way includes a new $45 million plant in Ireland and a $20 million facility in San Diego.

Lilly sales for the first six months of 1979 were up by 21% over the same period last year.

Lederle Film Available

Lederle Laboratories has produced a medical education film that not only explores the nature of side effects of psychopharmacologic agents but also looks into the physician's legal position should there be an action resulting from side effects.

About one-third of the 30-minute film is devoted to legal matters; the remainder is divided between detailed techniques of management and common neuromuscular side effects. The title is "Neuroleptic Side Effects: The Medicolegal Aspects."

The film may be booked by contacting a Lederle medical representative or by writing to Mr. David Hillman, American Cyanamid Co., Wayne, N.J. 07476.

Patient Education Reprints

"Living with High Blood Pressure" is the theme of two public educational pieces in the READER'S DIGEST. "The War Against Stroke," written by James H. Winchester, and "To Control *Your* High Blood Pressure," by Susan W. Thompson, are brief and easily read. Either one or both could be made a part of a patient educational program. Each of the articles is available in reprint form for prices varying from 10 for $1 to 1,000 for $25 with proportionate prices for intermediate amounts.

Address the Reprint Editor, READER'S DIGEST, Pleasantville, N.Y. 10570.

Physician Recognition Awards

The following Indiana physicians are recent recipients of the AMA's Physician Recognition Award. This award is official documentation of Continuing Medical Education hours earned, and is acceptable proof in most states requiring CME in re-registration that the mandatory hours of CME have been accomplished.

Barker, John C., Indianapolis
Basavaraja, Hiremat, Muncie
Batacan, George A., Michigan City
Bechtol, Lavon D., Indianapolis
Belcher, Alan D., Marion
Bizer, Mier A., Jeffersonville
Blaisdell, William F., Seymour
Blossom, Paul W., Richmond
Brown, Gordon T., Indianapolis
Chambers, Richard K., Anderson
Doumanian, Heratch O., Merrillville
Edwards, Judith A. J., Indianapolis
Ferguson, Philip C., Wabash
Fiacable, Joseph P., Fort Wayne
Forrest, Otto N., South Bend
Foster, Lowell G., Indianapolis
Greene, Morgan E., Indianapolis
Guinigundo, Noli C., Brookville
Hakami, Mohamed T., Huntingburg
Hardin, Wayne E., Ossian
Ignacio, Olegario, J., Jeffersonville
Irwin, Gerald P., Alexandria
Johnson, Stephen L., Evansville
Johnston, Richard M., Fort Wayne
Kamen, Jack M., Gary
Kilgore, Byron W., Fort Wayne
Kim, Eun Y., Warsaw
Longstaff, John P., Evansville
Love, John W., Madison
Malachowski, Robert M., Indianapolis
McGarvey, William K., Indianapolis
Morton, Philip M., Indianapolis
Nill, John H., Fort Wayne
O'Brien, Francis E., Rensselaer
Obaid, Nazzal, Griffith
Paff, James R., Kokomo
Pesarillo, Servando N., Kokomo
Pirakitikulr, Ungsana I., Crown Point
Reyes, Nestor C., New Whiteland
Rice, Katherine K., South Bend
Roth, Leo, Merrillville
Rubin, Simon S., Merrillville
Schlaegel, Theodore F., Indianapolis
Smith, Wilbur L., Indianapolis
Somani, Indra K., Merrillville
Spencer, Beaufort A., Bloomington
Stern, Mona K., Gary
Stettbacher, Lynne L., Fort Wayne
Stewart, John C., Marion
Stewart, Paul N., Indianapolis
Winters, Peter L., Indianapolis
Wongse-Sanit, Vatchara M., Crown Point
Zucker, Edward, Munster
Zwickel, Ralph E., Newburgh

Court Action

Indiana Malpractice Act Applicable To Federal Diversity Malpractice Claims

The section of the Indiana Medical Malpractice Act that requires submission of potential medical malpractice claims to a medical review panel before filing in a court is constitutional, a federal trial court in Indiana ruled.

In the malpractice action, the heirs and administrators of the estate of a deceased man claimed that he had been treated negligently by an Indiana physician and hospital. The defendants moved to dismiss the suit because the plaintiffs had not complied with the screening panel requirement of the Indiana Medical Malpractice Act.

The plaintiffs contended that the provision applied only to cases brought in state courts, and not to those based on diversity of citizenship, which were brought in federal courts. The federal trial court disagreed with them, holding that the act does apply to actions brought in federal courts sitting in Indiana. With respect to a claim of this nature, the federal court was, in effect, sitting as a state court, it said.

On the issue of the statute's constitutionality, the court recognized that courts in at least eleven different states have upheld the constitutionality of similar provisions. In Louisiana, the malpractice legislation, which was upheld, was virtually identical to the Indiana statute, the court said.

The plaintiffs also contended that the required submission to a medical review panel violated the constitutional right to trial by jury. Such a procedural change is constitutionally permissible, the court said. The statute does not foreclose a claimant's right to have his case heard by a jury, but only requires that claimants first participate in the review panel procedure, the determination of which is admissible as expert testimony at trial, the court said.

Further, the plaintiffs contended that the presence of health care providers on the panel would prejudice its determinations. Such a claim was too speculative to establish prejudice, and was contrary to the legislature's intention to rely on expert opinions, the court said.

Another constitutional challenge raised by the plaintiffs was that the requirement of submission to a review panel violated their right to equal protection of the law. Any separate classifications of individuals protected by a statute which are wholly irrelevant to the objectives of the state legislature will violate equal protection, the court said. The separate classification of health care providers in this statute is a reasonable one and relevant to the legislature's intention, the court said.

The court declined to render a decision on the constitutionality of the Act's provision relating to the dollar limitation placed on recovery. The issue was not yet ripe for ruling, the court said.

The plaintiffs also claimed that the requirement that claims be submitted to a review panel violated a claimant's right of access to the courts and due process. The expense and time required to present the claim to a review panel are not necessarily unreasonable restrictions on one's access to the courts, the court said. Furthermore, a claimant's right to pursue litigation is not the sort of "fundamental" right protected by constitutional due process, the court concluded.—*Hines v. Elkhart General Hospital,* 465 F. Supp. 421 (D.C., Ind., Jan. 15, 1979)

Courtesy of THE CITATION, July 1, 1979.

INDIANA MEDICAL BUREAU

1010 East 86th St.—72 Winterton
Indianapolis 46240
844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service

Some of the things we'll give her you can't pay for.



Self-respect, for one thing. And warmth. Companionship. Motivation.

These are things you can't buy for someone.

But everyone who comes to Americana finds them. Free.

Because Americana is more than you expect. It's not just a health care center. It's almost a substitute home. And the people who work here aren't just skilled in their professions. They're skilled in humanity, too.

The result is a place that's made for people.

When someone you love needs nursing care, let it be nursing care with love in it.

Let it be Americana.

Call us. Come see us.

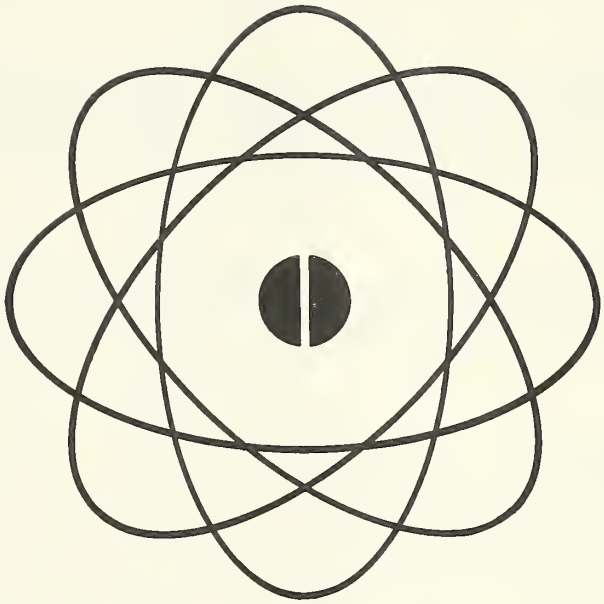
Americana Healthcare Center

1345 N. Madison Ave. / Anderson, IN 46011 / (317) 644-2888
343 S. Nappanee St. / Elkhart, IN 46514 / (219) 293-2544
5600 E. 16th St. / Indianapolis, IN 46218 / (317) 356-0911
2010 N. Capitol Ave. / Indianapolis, IN 46202 / (317) 924-5821
8350 Naab Rd. / Indianapolis, IN 46260 / (317) 297-4111
3518 S. Lafountain St. / Kokomo, IN 46901 / (317) 453-4666
2201 Cason St. / Lafayette, IN 47904 / (317) 447-4102

OPEN VISITING HOURS • APPROVED FOR MEDICARE
Accredited by the Joint Commission on Accreditation of Hospitals

Qualified patients with Blue Cross or other
major insurance company benefits accepted.

Americana—The nursing care for people who care about quality.



Medicine in the Nuclear Age

130th Annual Convention
of the
Indiana State Medical Association

October 13-17, 1979

Sheraton West Hotel
2544 Executive Drive
Indianapolis, Indiana

CONVENTION SECTION

Table of Contents

OFFICIAL CALL 673

HOUSE OF DELEGATES 674

REFERENCE COMMITTEES 679

50-YEAR CLUB 679

RESOLUTIONS 680

SCHEDULE OF EVENTS 682

PHOTO SECTION

- Officers 690
- Trustees 691
- Alternate Trustees 692
- AMA Delegates/Alternates 693
- Section Officers 694
- Guest Speakers 697

ANNUAL REPORTS

- Reports of Officers 701
- Reports of Commissions 708
- Reports of Committees 711
- Reports of Ad Hoc Committees 713
- Miscellaneous Reports 714
- Reports of Trustees 715
- Late/Supplemental Reports 719

SCIENTIFIC EXHIBITS 720

TECHNICAL EXHIBITS 722

Official Call to the House of Delegates

The next annual session of the Indiana State Medical Association will be held at the Sheraton West Hotel, Indianapolis, Indiana, Oct. 13, 14, 15 and 16, 1979.

The House of Delegates will be constituted as follows: Marion County, 25 delegates; Lake County, 11 delegates; Allen County, 7 delegates; Vanderburgh County, 7 delegates; St. Joseph County, 5 delegates; Delaware-Blackford, 4 delegates; Bartholomew-Brown, Owen-Monroe, Tippecanoe, Vigo and Wayne-Union County societies, each 3 delegates; Daviess-Martin, Dearborn-Ohio, Elkhart, Fayette - Franklin, Fountain - Warren, Grant, Harrison-Crawford, Howard, Jefferson-Switzerland, LaPorte, Madison, Parke-Vermillion and Porter County societies each 2 delegates; the other 55 county societies, each 1 delegate; 14 trustees and the ex-presidents—namely, M. C. Topping, Kenneth L. Olson, Guy A. Owsley, Maurice E. Glock, Donald E. Wood, Joseph M. Black, Eugene S. Rifner, Patrick J. V. Corcoran, Lowell H. Steen, Malcolm O. Scamahorn, Peter R. Petrich, James H. Gosman, Joe Dukes, Gilbert M. Wilhelmus, Vincent J. Santare, John W. Beeler and Eli Goodman; the American Medical Student Association, 1 delegate. The delegate or their designated alternate delegate elected by their respective section shall also be a member without power to vote. The following shall be ex officio members: the president, president-elect, executive director, treasurer, assistant treasurer, speaker, vice-speaker and delegates to the American Medical Association, all without power to vote, except in the case of a tie vote, when the speaker or person presiding shall cast the deciding vote.

All delegates must present their credentials card certified by their county medical society before being seated as a delegate. No delegate will be seated without proper certification.

The House of Delegates will convene promptly at 2 p.m., EST, Saturday, Oct. 13, in the Sheraton West Hotel, Indianapolis. The final meeting of the House of Delegates will convene at 9 a.m., Wednesday, Oct. 17, in the Sheraton West Hotel.

The order of business will be as follows:

1. Call to order by the President.
2. Invocation.
3. Roll call and seating of qualified delegates.
4. Announcements from the chair.
5. Tribute to members of Indiana State Medical Association who have died since the 1978 session.
6. Reading of minutes of previous meetings.
7. Introduction of guests.
8. President's address.
9. Appointment of Reference Committees and assignment of meeting rooms.
10. Unfinished business.
11. Report of president of the ISMA Auxiliary.
12. Report of the Indiana Chapter, American Medical Student Association.
13. Report of president of Blue Shield.
14. Report of executive director.
15. Report of treasurer.
16. Report of chairman of the Board.
 A. Reports of actions of the Board of Trustees.
17. Report of trustees.
18. Report of THE JOURNAL editor.
19. Report of AMA delegates.
20. Ad Hoc Committee to Supervise Pilot Project on Medical and Health Care in Jails.
21. Ad Hoc Data Processing Committee.
22. Ad Hoc Committee on Immunization.
23. I-MEDIC
24. Reports of committees and commissions.

Committees

(1) Executive
(2) Grievance
(3) Future Planning
(4) Medico-Legal
(5) Arbitration and Negotiations
(6) Impaired Physician
(7) Medical Education Fund

Commissions

(1) Constitution and Bylaws
(2) Convention Arrangements
(3) Legislation
(4) Public Relations
(5) Medical Education
(6) Medical Services

25. New Business:
 (1) Matters referred by Board of Trustees
 (2) Matters referred by Executive Committee
 (3) Resolutions
 (4) Selection of city for 1984 meeting
 1980-Indianapolis-October 11-15
 1981-Indianapolis-October 24-28
 1982-Indianapolis-October 16-20
 1983-Evansville-October 15-19

The election of officers will be the first order of business at the final meeting of the House of Delegates. In addition to the regular officers, the terms of the following AMA delegates and alternates expire Dec. 31, 1979, and their successors must be elected at the session: Delegates to the American Medical Association to succeed Patrick J. V. Corcoran, Evansville, and Peter R. Petrich, Attica; alternate delegates to succeed Thomas C. Tyrrell, Hammond and Marvin E. Priddy, Fort Wayne.

Delegates from the Third, Sixth, Ninth and Twelfth districts are reminded that the terms of their trustees will expire Oct. 17, 1979, and new trustees should be elected to succeed the following:

Third: Thomas A. Neathamer, Jeffersonville
Sixth: Davis W. Ellis, Rushville
Ninth: John A. Knote, Lafayette
Twelfth: Alvin J. Haley, Fort Wayne

Some of these elections may already have been held, but they should be reported to the House of Delegates at this session for confirmation.

Donald F. Foy
Executive Director

1979 House of Delegates

COUNTY AND DELEGATES	Alternate Delegates
ADAMS (1)	
Norval S. Rich Decatur	Harold Zwick Decatur
ALLEN-FORT WAYNE (7)	
William R. Cast Fort Wayne	Robert W. Dettmer Fort Wayne
Thomas A. Felger Fort Wayne	James J. Harris Fort Wayne
Fred W. Dahling New Haven	Alan W. Sidel Fort Wayne
Marvin E. Priddy Fort Wayne	David P. Schlueter Fort Wayne
Charles E. Schoenhals Fort Wayne	Philip C. Schubert Fort Wayne
Edwin E. Stumpf Fort Wayne	Richard E. Tielker Fort Wayne
Charles H. Aust Fort Wayne	Harry D. Tunnell Fort Wayne
BARTHOLOMEW-BROWN (3)	
C. David Ryan Columbus	Lindley L. Gammell Columbus
Robert M. Siebel Nashville	
BENTON (1)	
Manuel Scheurich Oxford	
BOONE (1)	
Paul R. Honan Lebanon	Don W. Boyer Lebanon
CARROLL (1)	
T. Neal Petry Delphi	Stephen C. Mayers Delphi
CASS (1)	
Richard L. Glendening Logansport	Joseph A. Frederick Logansport
CLARK (1)	
William R. Greene Jeffersonville	David H. Jones Charlestown
CLAY (1)	
Robert Oehler Brazil	Everett L. Conrad Brazil
CLINTON (1)	
Lee F. Dupler Frankfort	Charles E. Bush Frankfort
DAVIESS-MARTIN (2)	
Robert E. Chattin Loogootee	
H. O. Norton Washington	
DEARBORN-OHIO (2)	
Henry W. Conrad Lawrenceburg	Ivan T. Lindgren Aurora
Gordon Fessler Rising Sun	
DECATUR (1)	
Robert Acher Greensburg	

COUNTY AND DELEGATES	Alternate Delegates
DE KALB (1)	
William B. Hughes Waterloo	William Hathaway Auburn
DELAWARE-BLACKFORD (3)	
Warren L. Bergwell Muncie	Robert E. Hunter Muncie
Donald W. Hunsberger Montpelier	Larry Cole Yorktown
Ross L. Egger Daleville	Serverino T. Sulit Hartford City
DU BOIS (1)	
Bernard P. Kemker Jasper	Jeffery C. Rendel Jasper
ELKHART (2)	
John B. Guttman Wakarusa	Burton E. Kintner Elkhart
G. Beach Gattman Elkhart	John B. Guttman Wakarusa
FAYETTE-FRANKLIN	
William F. Kerrigan Connersville	John M. Lockhart Connersville
Perry F. Seal	Noli C. Guinigundo Brookville
FLOYD (1)	
Everett Bickers Floyds Knobs	Howard A. Pope, M.D. New Albany
FOUNTAIN-WARREN (2)	
Max N. Hoffman Covington	Lowell R. Stephens Covington
Carl Nelson West Lebanon	
FULTON (1)	
Joseph D. Richardson Rochester	Pedro G. Del Rosario Rochester
GIBSON (1)	
James F. Peck Princeton	William Dye Oakland City
GRANT (2)	
Robert Brown Marion	Laurence K. Musselman Marion
Shirley Khalouf Marion	P. J. Fisher Marion
GREENE (1)	
Mathias S. Mount Bloomfield	J. M. Lardizabal Bloomfield
HAMILTON (1)	
A. Adrian Lanning Noblesville	Joe R. Lloyd Noblesville
HANCOCK (1)	
Ray A. Haas Greenfield	Gary C. Sharp Greenfield
HARRISON-CRAWFORD (2)	
Wm. J. Brockman Corydon	Carl Dillman Corydon
HENDRICKS (1)	
William A. Edwards Plainfield	Eric D. Clark Danville

1979 House of Delegates

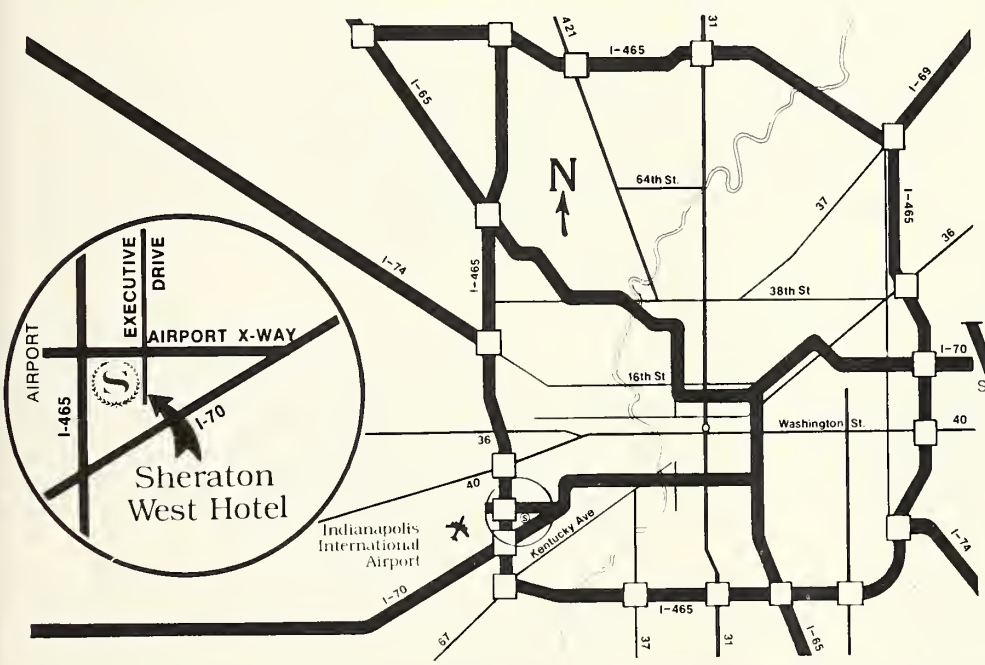
COUNTY AND DELEGATES	Alternate Delegates
HENRY (1)	
George Morec New Castle	O. Lynn Webb New Castle
HOWARD (2)	
Jack W. Higgins Kokomo	Jere D. Guin Kokomo
Richard P. Miethke Kokomo	
HUNTINGTON (1)	
Paul E. Doermann Huntington	Barth Wheeler Huntington
JACKSON (1)	
Mark M. Bevers Seymour	
JASPER (1)	
Kenneth J. Ahler Rensselaer	
JAY (1)	
James S. Fitzpatrick Portland	
JEFFERSON-SWITZERLAND (2)	
Ott McAtee Madison	Robert O. Zink Madison
D. C. Valenzuela Vevay	
JENNINGS (1)	
James Calli, Sr. North Vernon	F. Richard Walton North Vernon
JOHNSON (1)	
M. M. Wesemann Franklin	Joseph Young Greenwood
KNOX (1)	
Jack Shanklin Vincennes	
KOSCIUSKO (1)	
Wymond B. Wilson Mentone	David W. Haines Warsaw
LA GRANGE (1)	
Michael O. Mellinger La Grange	
LAKE (11)	
Leonard Neal Munster	Robert J. Bills Gary
Theodore R. Espy Gary	Reginald R. Barton Gary
Walfred A. Nelson Gary	Donald H. Rudser Whiting
William G. Grosso East Chicago	Walter A. Repay Munster
David E. Ross Gary	Jovencio P. Mangahas Hammond
Charles D. Egnatz Schererville	Peter Gutierrez Crown Point
Thomas C. Tyrrell Hammond	Filemon P. Lopez Dyer
Nicholas L. Polite Hammond	John A. Mirro Crown Point
Joseph J. Sala Merrillville	Lee Trachtenberg Munster
Thomas A. Gehring Merrillville	John J. Reed Hobart
Barron M. F. Palmer Hammond	
LA PORTE (2)	
Peter J. Pilecki Michigan City	John Luce Michigan City
Barbara Backer La Porte	William Scupham La Porte
LAWRENCE (1)	
James L. Mount Bedford	
MADISON	
Lawrence E. Allen Anderson	Ralph E. Reynolds Middletown
William C. Van Ness II Alexandria	Gerald P. Irwin Alexandria
MARION/INDIANAPOLIS (25)	
Berj Antreasian	Paul Boyce
James C. Carter	Charles B. Carter
Helen G. Czenkusch	Fred Dallas
Charles W. Dill	Edward M. Cockerill
A. Alan Fischer	Bernard J. Emkes
Kenneth Gray	David B. Goldenberg
Russell Judd	Ted L. Grisell
E. Henry Lamkin, Jr.	Richard Hutson
George T. Lukemeyer	John Isch
Loren M. Martin	Karl Koons
B. T. Maxam	Gerald Kurlander
I. E. Michael	Edwin S. McClain
Robert Mouser	John Moriarty
John D. MacDougall	David J. Need
Paul Muller	Max Norris
Robert Nagan	Robert Parr
Arvine G. Popplewell	Frederick Rice
George H. Rawls	Roland Rust
Robert Rudesill	Richard Schnute
Hugh K. Thatcher, Jr.	Dwight Schuster
Charles R. Thomas	John A. Smith
Morris E. Thomas	H. Marshall Trusler
Douglas H. White, Jr.	Edward Wheeler
Gary L. Bolinger	
MARSHALL (1)	
Michael F. Deery Culver	
MIAMI (1)	
Lloyd L. Hill Peru	James E. Duncan La Fountaine
MONTGOMERY (1)	
Carl B. Howland	Richard Eggers Crawfordsville
MORGAN (1)	
William H. Jones Martinsville	

1979 House of Delegates

COUNTY AND DELEGATES	Alternate Delegates
NEWTON (1)	
M. F. Guzman Morocco	Arthur Schoonveld Brook
NOBLE (1)	
John E. Ramsey Kendallville	Carl F. Stallman Kendallville
ORANGE (1)	
Phillip T. Hodgin Orleans	
OWEN-MONROE (3)	
Paul Wenzler Bloomington	Charles Robert Farmer Bloomington
Michael Silbert Bloomington	William D. Cutshall Bloomington
B. Diane Wells Spencer	Robert Rose Spencer
PARKE-VERMILLION (2)	
J. F. Swaim Rockville	Richard Bloomer Rockville
PERRY (1)	
Robert A. Ward Tell City	
PIKE (1)	
Donald L. Hall Petersburg	
PORTER (2)	
James R. Brown Valparaiso	John L. Swarner, Jr. Valparaiso
Frank M. Sturdevant Valparaiso	Joel I. Hull Chesterton
POSEY (1)	
John Vogel Mt. Vernon	John Crist Mt. Vernon
PULASKI (1)	
Edward L. Hollenberg Winamac	W. R. Thompson Winamac
PUTNAM (1)	
Fred E. Haggerty Greencastle	Richard Veach Bainbridge
RANDOLPH (1)	
Lowell W. Painter Winchester	B. D. Wagoner Union City
RIPLEY (1)	
A. A. Daftary Batesville	
RUSH (1)	
Frank H. Green Rushville	
ST. JOSEPH (5)	
Wallace S. Tirman South Bend	Samuel Bechtold South Bend
John Hildebrand South Bend	Michael Conroy South Bend
Richard A. Schaphorst Mishawaka	Kenneth L. Cline Wyatt
Alfred Cox South Bend	David J. Krizman South Bend
Robert D. Dodd South Bend	Michael G. Quinn South Bend
SCOTT (1)	
Marvin L. McClain Scottsburg	Jesus C. Bacala Scottsburg
SHELBY (1)	
Wilson L. Dalton Shelbyville	Floyd Thurston Shelbyville
SPENCER (1)	
Michael O. Monor Rockport	John C. Glackman Rockport
STARKE (1)	
Herbert C. Ufkes North Judson	
STEUBEN (1)	
R. Wyatt Weaver Angola	Donald G. Mason Angola
SULLIVAN (1)	
Glen McClure Sullivan	Betty J. Dukes Sullivan
TIPPECANOE (3)	
Wallace R. Van den Bosch Lafayette	David Evans Lafayette
Gilbert Gutwein Lafayette	Robert E. Hannemann Lafayette
George M. Underwood Lafayette	Patrick R. O'Neil Lafayette
TIPTON (1)	
Meridith B. Gossard Tipton	
VANDERBURGH (7)	
Thomas Kandul Evansville	Michael J. Dukes Evansville
Ray H. Burnikel Evansville	Robert L. Harris Evansville
Charles W. Hachmeister Evansville	Frank L. Hilton Evansville
Elizabeth Sowa Evansville	Irvin L. Heimburger Evansville
Eugene L. Hendershot Evansville	
Forrest F. Radcliff Evansville	William H. Getty Evansville
L. Ray Stewart Evansville	John D. Pulcini Evansville
VIGO (3)	
Ludimere Lenyo Terre Haute	Robert O. Lancent Terre Haute
William L. Strecker Terre Haute	J. Lewis Stoelting Terre Haute
Paul Humphrey Terre Haute	Robert Reed Terre Haute
WABASH (1)	
Fred Poehler La Fountaine	

1979 House of Delegates

COUNTY AND DELEGATES	Alternate Delegates
WARRICK (1)	
Carlos M. Ruiz Boonville	
WASHINGTON (1)	
Charles B. Carty Pekin	
WAYNE-UNION (3)	
James R. Lewis Richmond	Clarence G. Clarkson Richmond
C. G. Clarkson Richmond	John H. Mader Richmond
WELLS (1)	
Donald A. Dian Bluffton	Louis F. Bradley Bluffton
WHITE (1)	
Nolan A. Hibner Monticello	
WHITLEY (1)	
Thomas G. Hamilton Columbia City	C. Jules Heritier Columbia City



Sheraton West Hotel
SHERATON HOTELS & INNS, WORLDWIDE
2544 EXECUTIVE DRIVE
INDIANAPOLIS, INDIANA 46241
317-248-2481
800-325-3535
WILL GET YOUR SHERATON'S WORLDWIDE RESERVATION SERVICE

1979 House of Delegates

OFFICERS

President—Arvine G. Popplewell, Indianapolis
Immediate Past President—Eli Goodman, Charlestown
Chairman, Executive Committee—Paul W. Holtzman, Bloomington
Members, Executive Committee—John W. Beeler, Indianapolis and Martin J. O'Neill, Valparaiso
Chairman of the Board—Alvin J. Haley, Fort Wayne
Treasurer—Joseph F. Ferrara, Franklin
Assistant Treasurer—Douglas H. White, Jr., Indianapolis
Speaker—Lloyd L. Hill, Peru
Vice Speaker—Lawrence E. Allen, Anderson
Executive Director—Donald F. Foy, Indianapolis

SECTION DELEGATES (19)

Allergy—Paul D. Isenberg, Indianapolis
Anesthesiology—Robert Longshore, Kokomo
Cutaneous Medicine—Gary Dillman, Columbia City
Emergency Medicine—John C. Johnson, Evansville
College Health Physician—
Family Physicians—Bernard J. Emkes, Indianapolis
Internal Medicine—
Directors of Medical Education—
Nervous and Mental Diseases—
Neurological Surgery—
Obstetrics and Gynecology—
Ophthalmology and Otolaryngology—
Orthopedic Surgery—Gilbert Gutwein, Lafayette
Pathology and Forensic Medicine—Garry L. Bolinger, Indianapolis
Pediatrics—Robert Parr, Indianapolis
Public Health and Preventive Medicine—Robert W. Vermilya, Lafayette
Radiology—Dale Parshall, Elkhart
Surgery—
Urology—

PAST PRESIDENTS

M. C. Topping, Terre Haute
Kenneth L. Olson, South Bend
Guy A. Owsley, Hartford City
Maurice E. Glock, Fort Wayne
Donald E. Wood, Indianapolis
Joseph M. Black, Seymour
Eugene S. Rifner, Van Buren
Patrick J. V. Corcoran, Evansville
Lowell H. Steen, Evansville
Malcolm O. Scamahorn, Pittsboro
Peter R. Petrich, Attica
James H. Gosman, Indianapolis
Joe Dukes, Dugger
Gilbert M. Wilhelmus, Evansville
Vincent J. Santare, Munster
John W. Beeler, Indianapolis
Eli Goodman, Charlestown

TRUSTEES

1st District—John A. Bizal, Evansville
2nd District—Harold M. Manifold, Bloomington
3rd District—Thomas A. Neathamer, Jeffersonville
4th District—Howard C. Jackson, Madison
5th District—Paul Siebenmorgen, Terre Haute
6th District—Davis W. Ellis, Rushville
7th District—Donald C. McCallum, Indianapolis
—John G. Pantzer, Indianapolis
8th District—Jack M. Walker, Muncie
9th District—John A. Knote, Lafayette
10th District—Martin J. O'Neill, Valparaiso
11th District—Herbert C. Khalouf, Marion
12th District—Alvin J. Haley, Fort Wayne
13th District—Donald S. Chamberlain, South Bend

ALTERNATE TRUSTEES

1st District—De Verre Gourieux, Evansville
2nd District—Edgar R. Cantwell, Vincennes
3rd District—Richard G. Huber, Bedford
4th District—Mark M. Bevers, Seymour
5th District—William G. Bannon, Terre Haute
6th District—Dan W. Hibner, Richmond
7th District—I. E. Michael, Indianapolis
—Gerald J. Kurlander, Indianapolis
8th District—Ted S. Doles, Middletown
9th District—Max N. Hoffman, Covington
10th District—Leonard W. Neal, Munster
11th District—Frederick C. Poehler, La Fountaine
12th District—Franklin A. Bryan, Fort Wayne
13th District—John W. Luce, Michigan City

AMA DELEGATES

Patrick J. V. Corcoran, Evansville
Peter R. Petrich, Attica
George T. Lukemeyer, Indianapolis
Malcolm O. Scamahorn, Pittsboro
Ross L. Egger, Daleville

AMA ALTERNATE DELEGATES

Thomas C. Tyrrell, Hammond
Marvin E. Priddy, Fort Wayne
Robert M. Seibel, Nashville
Gilbert M. Wilhelmus, Evansville
Everett E. Bickers, Floyds Knobs

Fifty-Year Club—1979

ALLEN COUNTY
Arthur N. Ferguson, Walnut Creek, California (formerly Fort Wayne)

BOONE COUNTY
Lawrence S. Bailey, Zionsville

CLAY COUNTY
John C. Shattuck, Brazil

CLINTON COUNTY
Theodore A. Dykhuizen, Frankfort

DE KALB COUNTY
Floyd B. Kantzer, Albuquerque, New Mexico (formerly Garrett)
Loren E. Jinnings, Auburn

DELAWARE-BLACKFORD COUNTY
Lall G. Montgomery, Muncie
William J. Quick, Muncie

GRANT COUNTY
Arthur P. Rhamy, Wabash

HUNTINGTON COUNTY
John B. Eviston, Huntington

LA PORTE COUNTY
Melvin D. Gardner, Michigan City

MARION COUNTY
Robert R. Beach, Indianapolis
Greta M. Gibson, Indianapolis
John H. Greist, Indianapolis
Verne K. Harvey, Sr., Zionsville
James E. Jobes, Indianapolis
Tracy C. Owens, Indianapolis
Raymond R. Rice, Naples, Florida (formerly Indianapolis)
Thomas P. Rogers, LaJolla, California (formerly Indianapolis)
Clifford C. Taylor, Indianapolis
Donald J. White, Indianapolis
Irvin W. Wilkens, Indianapolis

POSEY COUNTY
Paul R. Boren, Poseyville

RANDOLPH COUNTY
Leroy B. Chambers, Union City

ST. JOSEPH COUNTY
Donald Grillo, South Bend
Wendell L. Spalding, Mishawaka
Merle E. Whitlock, Mishawaka

SCOTT COUNTY
Marvin L. McClain, Scottsburg

SULLIVAN COUNTY
James H. Crowder, Sullivan

TIPPECANOE COUNTY
Lowell C. Smith, Lafayette
Joseph W. Strayer, Lafayette
Wendell A. Weller, West Lafayette

VANDERBURGH COUNTY
Edward K. Denzer, Evansville
Francis W. Porro, Evansville
Ralph Wilson, Evansville

Reference Committees

REFERENCE COMMITTEE #1—
Reports of Officers
L. Ray Stewart, M.D., Chairman, Evansville (Vanderburgh)
Thomas Neal Petry, M.D., Delphi (Carroll)
Max N. Hoffman, M.D., Covington (Fountain-Warren)
Richard A. Schaphorst, M.D., Mishawaka (St. Joseph)
Wilson Dalton, M.D., Shelbyville (Shelby)
Robert Forste, M.D., Columbus (Bartholomew-Brown)

REFERENCE COMMITTEE #2—
Constitution and Bylaws
Leonard Neal, M.D., Chairman, Munster (Lake)
Paul Humphrey, M.D., Terre Haute (Vigo)
Thomas A. Felger, M.D., Fort Wayne (Allen)
Kenneth J. Ahler, M.D., Rensselaer (Jasper)
Donald Taylor, M.D., Muncie (Blackford)
William F. Kerrigan, M.D., Connersville (Fayette)

REFERENCE COMMITTEE #3—
Legislative
Shirley Khalouf, M.D., Chairperson, Marion (Grant)
William R. Cast, M.D., Fort Wayne (Allen)
Warren Bergwall, M.D., Muncie (Delaware)
B. T. Maxam, M.D., Indianapolis (Marion)
John Guttman, M.D., Wakarusa (Elkhart)
Marvin McClain, M.D., Scottsburg (Scott)

REFERENCE COMMITTEE #4—
Medical Education and Insurance
George H. Rawls, Chairman, Indianapolis (Marion)
Frank Moxley Sturdevant, M.D., Valparaiso (Porter)
Paul Wenzler, M.D., Bloomington (Monroe)
Ray H. Burnikel, M.D., Evansville (Vanderburgh)
Wm. Van Ness II, M.D., Alexandria (Madison)
Wallace Tirman, M.D., South Bend (St. Joseph)

REFERENCE COMMITTEE #5—
Miscellaneous
Lee F. Dupler, M.D., Chairman, Frankfort (Clinton)
Thomas A. Gehring, M.D., Merrillville (Lake)
James L. Mount, M.D., Bedford (Lawrence)
Helen G. Czenkusch, M.D., Indianapolis (Marion)
Gregory Larkin, M.D., Greencastle (Putman)
Glen McClure, M.D., Sullivan (Sullivan)

REFERENCE COMMITTEE #6—
AMA Matters
Peter Petrich, M.D., Chairman, Attica (Fountain-Warren)
Robert Seibel, M.D., Nashville (Bartholomew)
Sprague Gardiner, M.D., Indianapolis (Marion)
Michael O. Monar, M.D., Rockport (Spencer)
Everett Bickers, M.D., Floyds Knobs (Floyd)
Thomas G. Hamilton, M.D., Columbia City (Whitley)

Resolutions

Resolution 79-1

Introduced by: Vanderburgh County Medical Society

Subject: Physician Exemption from Jury Duty

Referred to:

Whereas, It is generally assumed that all citizens may be called for jury duty and required to serve as part of their civic responsibility; and

Whereas, Exemptions from this civic responsibility have proliferated over the years; and

Whereas, Numerous classes of citizens are by Indiana law exempted from jury duty, including veterinarians, dentists, policemen, firemen, members of school boards in cities over 300,000, and many others; and

Whereas, These exemptions are scattered throughout the statutes and are not apparently based on any common consideration or standard; now, therefore be it

Resolved, That the Indiana State Medical Association House of Delegates urges the Board of Trustees to work toward introduction and passage of legislation by the General Assembly which would either require a uniform obligation from all citizens in regard to jury duty or would exempt from such service all physicians in the practice of medicine.

Resolution 79-2

Introduced by: ISMA Third District Medical Society

Subject: Smoking Banned at ISMA Business & Educational Activities

Referred to:

Whereas, Cigarette smoking constitutes one of our nation's greatest threats to human health; and

Whereas, Cigarette smoking represents the most unnecessary and most preventable cause of illness, disability, and death in America; and

Whereas, $23 million of our tax dollars are being spent on antismoking campaigns this year, $60 million on tobacco subsidy and $800 million on federal cancer research budget; and

Whereas, $17 billion is lost to this country each year as a result of smoking-related medical care, accidents, absenteeism and lost work output, and

Whereas, More than 10% of all hospital and medical expenses in the U.S. are tobacco related; and

Whereas, Health professionals are viewed as exemplars; and

Whereas, The majority of people believe that teachers, doctors, and other health professionals should set a good example by not smoking; and

Whereas, Mass media public information campaigns and educational efforts should continue; and

Whereas, The rights and health of nonsmokers should be protected; and

Whereas, secondhand smoke can cause eye irritation, headaches, and nose and throat discomfort; now, therefore it

Resolved, That as of Oct. 17, 1979, the Indiana State Medical Association's House of Delegates has henceforth banned smoking during any of the Association's official business and educational activities; and

Resolved, That the Indiana State Medical Association of such official action hereby notify the media, other health professional associations, state legislators and others, that we are concerned and have acted and will continue to act.

Resolution 79-3

Introduced by: Impaired Physician Peer Review Committee

Subject: Prescribing of Controlled Drugs for Oneself or One's Family

Referred to:

Whereas, The American Medical Association and Indiana State Medical Association have no policy on self prescribing of controlled drugs; and

Whereas, Physicians are at high risk for dependence on addicting drugs; and

Whereas, The Impaired Physician Peer Review Committee is very concerned about the high risk to physicians and their families of drug dependence; now, therefore be it

Resolved, That the Indiana State Medical Association considers it unethical to prescribe narcotics, sedatives, minor tranquilizers, stimulants and narcotic derivatives for oneself or one's family except for brief treatment of acute situations until consultation can be obtained; and be it further

Resolved, That the Indiana State Medical Association recommend that the pharmaceutical companies do not provide samples of the above types of drugs to physicians.

Resolution 79-4

Introduced by: Commission on Medical Services and ISMA Board of Trustees

Subject: Establishment of a For-Profit Life Insurance Company

Referred to:

Whereas, The Subcommission on Insurance has conducted extensive studies during the past year of insurance programs; and

Whereas, The Commission feels there would be substantial economies and other insurance benefits to ISMA members through the establishment of a life insurance company to take over those ISMA sponsored programs presently underwritten by CNA; and

Whereas, The ISMA Board of Trustees concurs that an ISMA Life Insurance Company could, in all probability, develop better insurance programs for the membership; and

Whereas, The results of the Insurance Survey, sent to the ISMA membership, indicate that a clear majority of Association members responding to the survey approve the formation of such a company; and

Whereas, The formation of an insurance company is consistent with House of Delegates action 73-22; now, therefore be it

Resolved, That the Indiana State Medical Association House of Delegates approve the formation of a life insurance company; and be it further

Resolved, That ISMA Board of Trustees and President are hereby authorized and directed, in the name of ISMA or otherwise, to purchase up to $300,000 of Class B stock in the life insurance company, to execute all instruments, documents and certificates and take all such further and other action in connection with the resolution hereinabove adopted as they may deem necessary, advisable or proper to effectuate the intent and purposes of the resolution.

Resolutions

Resolution 79-5

Introduced By: Allen County Medical Society

Subject: Length of ISMA Convention

Referred to:

Whereas, Most members of the House of Delegates of the Indiana State Medical Association are engaged in the private practice of medicine; and

Whereas, Demands upon their time to attend this convention and other important functions of organized medicine impose certain "fiscal restraints and time priorities" upon them; and

Whereas, This 130th annual meeting of the Indiana State Medical Association has been expanded to five days; and

Whereas, The House of Delegates attempts to achieve a most effective use of its time without sacrificing the quality of its judgments; now, therefore be it

Resolved, That the House of Delegates make known its preference to the Commission on Convention Arrangements of a three, four or five day annual meeting combined with a weekend.

130th Annual Convention
Sheraton West Hotel
Indianapolis

The scientific program for the 130th Annual Convention of the Indiana State Medical Association is acceptable for six prescribed and elective hours by the American Academy of Family Physicians. (The prescribed hours are for attendance at the Family Physicians Section meeting.)

Scientific programs presented during the 1979 ISMA Convention are accredited on an hour-for-hour basis for inclusion in Category 1 of the application for the AMA Physician's Recognition Award. Hours allowable in any given program are shown below the program listing.

All events will be on Eastern Standard (Indianapolis) time.

Financial contributions have been received by ISMA from the following firms to assist with the educational program at the 1979 convention:

Mead Johnson Nutritional Division
Mead Johnson Pharmaceutical Division
A. H. Robins Company
Parke-Davis

Golf Chairman—Bernard J. Emkes, M.D., Indianapolis
Tennis Chairman—Edward C. Wheeler, M.D., Indianapolis

SATURDAY, OCTOBER 13—Schedule of Events

9 a.m.	Registration
9 a.m.	ISMA Executive Committee meeting
10:30 a.m.	ISMA Board of Trustees meeting
Noon	ISMA Board of Trustees luncheon
Noon-5 p.m.	Opening of technical and scientific exhibits *(Scientific exhibits located on second floor)*
2 p.m.	House of Delegates meeting
2 p.m.	Small County Delegates meeting
7 p.m.	ISMA Board of Trustees formal dinner

SUNDAY, OCTOBER 14—Schedule of Events

1-5 p.m., 7 p.m.—Midnight	**REFERENCE COMMITTEE MEETINGS (Five)** Members are urged to attend!
11:30-1:30	Sandwich and Salad Buffet *(All sections to participate together)*
7 a.m.-Noon	Open for recreation
8:30 a.m.	Registration
8:30-5 p.m.	Technical and scientific exhibits *(Scientific exhibits located on second floor)*
8 a.m.	Breakfast meeting of AMA and ISMA officials
9 a.m.	Meeting of Board of Trustees, AMA officials and presidents of county medical societies
Noon	Editorial Board luncheon

ISMA SECTION ON RADIOLOGY AND INDIANA ROENTGEN SOCIETY
(Possible hours of accreditation: 1.25)

9:30 a.m.	Executive Committee meeting
10:15 a.m.	Indiana Roentgen Society meeting *(ISMA Section on Radiology, general meeting)*
11 a.m.	Scientific meeting (Subject: Scientific and Patient Care Implications of Issues Facing Radiologic Practice)
11-11:30 a.m.	Patient Care Consequences of Non-Radiologists Performing Radiology and Having Access to Hospital Records
11:30-Noon	Scientific Implications of Computed Tomographic Unit Guidelines
Noon—12:15 p. m.	Additional Comments and/or Consensus (The scientific session will be conducted as panel discussions with radiologists chosen from throughout Indiana on the basis of their previous experiences and interest in the issues.) Election of 1980 Section Officers

AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS, INC., INDIANA CHAPTER

9 a.m.—4 p.m.	
9 a.m.	**Reconstructive Hand Surgery** *James W. Strickland, M.D., Indianapolis*
10:30 a.m.	Break
10:45 a.m.	**Rehabilitation Therapy** *Karen Harmond, Occupational Therapist, Indianapolis*
Noon	Sandwich and Salad Buffet
1 p.m.	**Primary Eye Care** *Charles L. McCormick, M.D., Franklin* *Nicholas Rader, M.D., Franklin*
2:30 p.m.	**Ophthalmology vs Optometry** *Jack L. Kane, M.D., Indianapolis*

SUNDAY, OCTOBER 14—Schedule of Events

ISMA SECTION ON DIRECTORS OF MEDICAL EDUCATION AND ASSOCIATION OF INDIANA DIRECTORS OF MEDICAL EDUCATION
(Possible hours of accreditation: 2.0)

1-3 p.m. **Essentials for Residency Programs**
Leonard D. Fenninger, M.D., Chicago

Election of 1980 Section Officers

1-4 p.m. **MEET THE PROFESSOR**
(Indiana University School of Medicine has arranged to conduct the conferences. John F. Phillips, M.D., Chairman)

(Possible hours of accreditation: 3.0 for entire session)

1 p.m. **How Much Testing Is Enough?**
John E. Jesseph, M.D., Indianapolis

2 p.m. **Medicine in the Nuclear Age: Whither Goeth Psychiatry?**
Hugh C. Hendrie, M.B. Ch.B., Indianapolis

3 p.m. **Pediatric Murmur: How, When and Why?**
Roger Hurwitz, M.D., Indianapolis

Program—ISMA Auxiliary

President—Mrs. Abner P. Bennett, Evansville
Chairman of ISMA Auxiliary Activities—Mrs. Dwight W. Schuster, Indianapolis.

Monday, October 15

9:30 a.m.-4 p.m. Chartered bus sightseeing and shopping tour at Keystone-at-the-Crossing
Evening Private gourmet dinner and special entertainment, Beef-N-Boards Dinner Theatre

Tuesday, October 16

All Auxiliary activities on Tuesday will be at the Sheraton West Hotel
8 a.m. Executive Committee meeting
10 a.m. Open Board meeting
Presentation of the HOSPICE program
Noon Luncheon
MUSIC THROUGH THE YEARS, Indianapolis Opera Company
6 p.m. Fifty Year Club Reception
6:30 p.m. President's Reception
7:30 p.m. President's Dinner
Entertainment—The Arbors, popular night club quartet and recording artists.

MONDAY, OCTOBER 15—Schedule of Events

11:30-1:30	Sandwich and Salad Buffet *(All sections to participate together)*
7-10 a.m.	Open for recreation
7:30 a.m.	ISMA Board of Trustees breakfast
8:30 a.m.	Registration
8:30-5 p.m.	Technical and scientific exhibits *(Scientific exhibits located on second floor)*
8 a.m.	IMPAC breakfast
10 a.m.	IMPAC board meeting
10 a.m.	Special Reference Committee
Evening	Private gourmet dinner and special entertainment Beef-N-Boards Dinner Theater (Details with reservation form)

Noon	**INDIANA CHAPTER, ASSOCIATION OF AMERICAN PHYSICIANS AND SURGEONS**
	Survival or Victory? *W. Daniel Jordan, M.D., Atlanta, Ga.*
1-5 p.m.	**GENERAL SCIENTIFIC MEETING** *(Possible hours of accreditation: 4.0)*
	Stanley M. Chernish, M.D. and W. Thomas Spain, M.D., moderators
	Welcome: Arvine G. Popplewell, M.D., president, ISMA
1 p.m.	**How Fit Is Fit?** *Larry W. Gibbons, M.D., M.P.H., Dallas*
2 p.m.	**Do You Have Any Risks?** *Jack H. Hall, M.D., Indianapolis*
3 p.m.	**How Dangerous is Low-Level Radiation?** *Bernard E. Oppenheim, M.D., Indianapolis*
4 p.m.	**Assisted Computerized Diagnosis** *Edward A. Patrick, M.D., Ph.D., Lafayette* *James Fattu, M.D., Ph.D., Evansville*

TUESDAY, OCTOBER 16—Schedule of Events

11:30-1:30 Sandwich and Salad Buffet
(All sections to participate except the Section on Internal Medicine)

7:30 a.m. ISMA Board of Trustees breakfast

8:30 a.m. Registration

8:30-5 p.m. Technical and scientific exhibits
(Scientific exhibits on second floor)

10 a.m. Small County Delegates meeting

Noon Past Presidents' luncheon

6 p.m. Fifty-Year Club Reception

6:30 p.m. President's Reception

7:30 p.m. President's Dinner
Entertainment: The Arbors, popular night club quartet and recording artists

8-4:30 p.m. **COMBINED MEETING—**
ISMA SECTION OF EMERGENCY ROOM PHYSICIANS, FAMILY PRACTICE SECTION, AND INDIANA ACADEMY OF FAMILY PHYSICIANS
(Possible hours of accreditation: 6.0)

8 a.m. Family Practice Section meeting
Bernard J. Emkes, M.D., chairman

Election of 1980 Section Officers

8 a.m. Emergency Medicine Section meeting
John C. Johnson, M.D., chairman

Election of 1980 Section Officers

8:45 a.m. **Diagnosis and Treatment of Arrhythmias**
Park Willis, III, M.D., East Lansing, Mich.

9:45 a.m. **Differential Diagnosis and Treatment of Diabetic Emergencies**
Frank Vinicor, M.D., Indianapolis

10:45 a.m. Break

11 a.m. **Acute Management of Drug Overdose**
Alan Handt, M.D., Indianapolis

Noon-1:30 Lunch Break and Meet the Professor

1:30 p.m. **Infectious Emergencies You Dare Not Miss**
Thomas G. Slama, M.D., Indianapolis

2:30 p.m. **Management of Hypertensive Crises**
Barry J. Materson, M.D., Miami, Fla.

3:30 p.m. **Brain Death and Organ Procurement**
Julius M. Goodman, M.D., Indianapolis
Charles B. Carter, M.D., Indianapolis

ISMA SECTION ON ALLERGY
(Possible hours of accreditation: 2.0)

TUESDAY, OCTOBER 16—Schedule of Events

ISMA SECTION ON INTERNAL MEDICINE, AMERICAN COLLEGE OF PHYSICIANS, INDIANA REGIONAL MEETING IN ASSOCIATION WITH INDIANA SOCIETY OF INTERNAL MEDICINE
(Possible hours of accreditation: 4.5)

8:15 a.m.	Registration
8:45 a.m.	Welcome: George T. Lukemeyer, M.D., F.A.C.P., ACP governor for Indiana, and Walter J. Daly, M.D., F.A.C.P., ACP governor-elect for Indiana
9 a.m.	**The Impact of Modern Non-Invasive Nuclear Imaging Techniques on the Diagnosis and Management of Heart Disease** *James V. Faris, M.D., Indianapolis* *Thomas M. Mueller, M.D., Indianapolis*
10 a.m.	**HDL Cholesterol and Atherosclerosis** *Richard C. Powell, M.D., F.A.C.P., Indianapolis*
10:30 a.m.	Break
10:50 a.m.	**Tips on the Use of Blood Gases** *Stephen J. Jay, M.D., F.A.C.P., Indianapolis*
11:20 a.m.	**Recertification: Is It of Value? Is It a Threat?** *Richard J. Reitemeier, M.D., F.A.C.P., Regent, American College of Physicians, Rochester, Minn.*
Noon	Lunch
	Peer Review: Its Successes, Failures and Pitfalls *Frederick C. Robbins, M.D., Cleveland, Ohio*
1:20 p.m.	Call to Order Fred Adler, M.D., president, Indiana Society of Internal Medicine
1:30 p.m.	**Does the A.S.I.M. Influence Government Policy?** *Mark Leasure, Director of Government Relations, American Society of Internal Medicine*
1:50 p.m.	**An Overview of Government Involvement in Medicine** *N. Thomas Connally, M.D., trustee, American Society of Internal Medicine*
2:20 p.m.	**Evolving Indications for Abdominal CT Scanning and Abdominal Ultrasonography** *Bryan T. Burney, M.D., Indianapolis* *J. Scott Lomax, M.D., Indianapolis*
3:20 p.m.	Break
3:40 p.m.	**Tips on Differentiating a Supraventricular Rhythm with Aberrant Conduction from a Ventricular Rhythm** *R. Joe Noble, M.D., Indianapolis*
4:10 p.m.	**Cost-Effective Usage of the Laboratory** *John A. Griep, M.D., Indianapolis*
4:40 p.m.	Adjournment

TUESDAY, OCTOBER 16—Schedule of Events

ISMA SECTION ON PREVENTIVE MEDICINE AND PUBLIC HEALTH, AND INDIANA ASSOCIATION OF PUBLIC HEALTH PHYSICIANS

(Possible hours of accreditation: 2.0)

Presiding: Robert K. McKechnie, M.D., president

9 a.m. **Pulmonary Function and Chronic Chest Disease**
Stephen Jay, M.D., Indianapolis

10 a.m. **Hypertension and Pediatric Patient**
Jerry Bergstein, M.D., Indianapolis

11 a.m. Business meeting
Election of 1980 Section officers

INDIANA ACADEMY OF OTOLARYNGOLOGY
(Possible hours of accreditation: 1.0)

1-3 p.m. Business meeting
Election of 1980 Section officers

Legislative Update 1979
J. William Wright, Jr., M.D., Indianapolis

Radionuclide Study of Thyroid Disease
Hee-Myung Park, M.D., Indianapolis

10-4 p.m. **ISMA SECTION ON PEDIATRICS AND INDIANA CHAPTER, AMERICAN ACADEMY OF PEDIATRICS**
(Possible hours of accreditation: 6.0)

10 a.m. **Rheumatic Disease in Pediatrics**
Murray Passo, M.D., Indianapolis

11 a.m. **Diagnosis of Thoracic & Abdominal Masses**
Robert Gerth, M.D., Indianapolis

Noon Sandwich and Salad Buffet

1 p.m. **Update in Neonatology**
Edward Gresham, M.D., Indianapolis

2 p.m. **Pediatric Nuclear Medicine**
Eugene D. Van Hove, M.D., Indianapolis

3 p.m. **CT Scanning of the Head in the Pediatric Patient**
C. Barrie Grossman, M.D., Indianapolis

4 p.m. **Reye's Syndrome**
Joseph Fitzgerald, M.D., Indianapolis

Election of 1980 Section Officers

ISMA SECTION ON SURGERY, INDIANA CHAPTER, AMERICAN COLLEGE OF SURGERY AND INDIANA CHAPTER, INTERNATIONAL COLLEGE OF SURGEONS

(Possible hours of accreditation: 1.0)

1 p.m. **Nuclear Scanning for Surgeons**
Eugene D. Van Hove, M.D., Indianapolis

Election of 1980 Section Officers

TUESDAY, OCTOBER 16—Schedule of Events

ISMA SECTION ON NEUROLOGICAL SURGERY, AND NEUROLOGICAL SOCIETY OF INDIANA

(Possible hours of accreditation: 3.0)

1-4 p.m.

Saphenoous Nerve Entrapment: An Unusual Cause of Knee Pain
Tom Leurssen, M.D., Indianapolis
Robert M. Worth, M.D., Indianapolis
Robert Campbell, M.D., Indianapolis

Treatment of Cushing's Disease by Transphenoidal Surgery
Julius M. Goodman, M.D., Indianapolis

Neurosurgical Management of Reye's Syndrome
Michael Turner, M.D., Indianapolis
Joseph Fitzgerald, M.D., Indianapolis

Preservation of Hearing in Acoustic Neurinoma Surgery
Michael Burt, M.D., Indianapolis

Syringomyelia: Evidence for a One-Way Valve System
Peter Hall, M.D., Indianapolis
Michael Turner, M.D., Indianapolis

Election of 1980 Section Officers

ISMA SECTION ON NERVOUS AND MENTAL DISEASE

(Possible hours of accreditation: 3.0)

1-4 p.m.

Theme: Treating Depression—Restoring the Family to Health

Moderator: Philip M. Morton, M.D., Indianapolis

Treatment Alternatives for the Depressed Adult
Vincent B. Alig, M.D., Indianapolis

Adolescent Patient—Delinquent or Depressed?
R. Michael Pearce, M.D., Indianapolis

When a Child Dies
Paul Stewart, M.D., Indianapolis

IMPAIRED PHYSICIANS COMMITTEE

(Possible hours of accreditation: 2.5)

Theme: Doctors Helping Doctors

2:30-5 p.m.

Physicians Helping Physicians
Perry R. Ayres, M.D., Columbus, Ohio

Sharing Experiences in Recovery
Panel of recovered physicians

Open AA meeting—International doctors in AA
Moderator: Gerald P. Johnston, M.D., Indianapolis

WEDNESDAY, OCTOBER 17—Schedule of Events

8:30-11 a.m. Technical and scientific exhibits
(Scientific exhibits located on second floor)

7:30 a.m. ISMA Board of Trustees breakfast

9 a.m. Final meeting of House of Delegates

Officers



Eli Goodman, M.D.
Immed. Past President*
Charlestown



Arvine G. Popplewell, M.D.
President, 1978-80*
Indianapolis



Donald F. Foy
Executive Director
Indianapolis



Joseph F. Ferrara, M.D.
Treasurer*
Franklin

NO PHOTO AVAILABLE

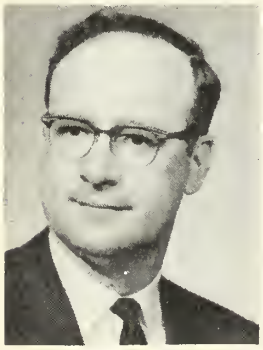
Douglas H. White, M.D.
Asst. Treasurer
Indianapolis



Lloyd L. Hill, M.D.
Speaker of the House
Peru



Lawrence E. Allen, M.D.
Vice-Speaker
Anderson



Alvin J. Haley, M.D.
Chairman
Board of Trustees*
Fort Wayne



Paul W. Holtzman, M.D.
Chairman
Executive Committee
Bloomington



John W. Beeler, M.D.
At Large Member
Executive Committee
Indianapolis



Martin J. O'Neill, M.D.
At Large Member
Executive Committee
Valparaiso

*Member, Executive Committee

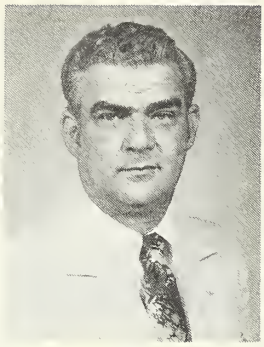
Board of Trustees



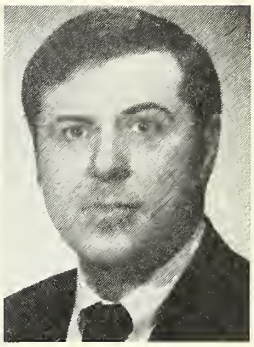
John A. Bizal, M.D.
Evansville
First District



Harold M. Manifold, M.D.
Bloomington
Second District



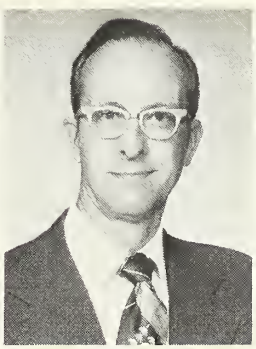
Thomas A. Neathamer, M.D.
Jeffersonville
Third District



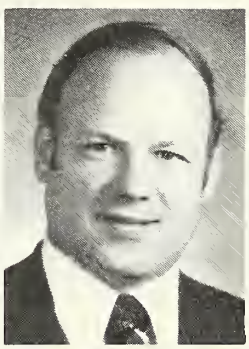
Howard C. Jackson, M.D.
Madison
Fourth District



Paul Siebenmorgen, M.D.
Terre Haute
Fifth District



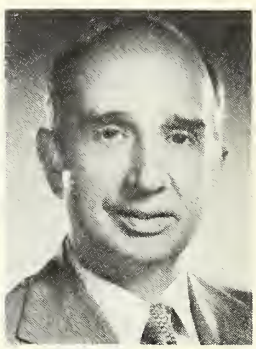
Davis W. Ellis, M.D.
Rushville
Sixth District



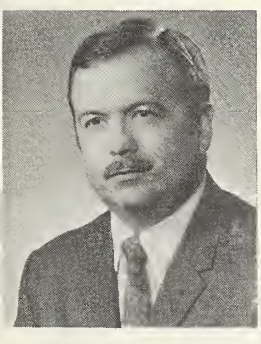
Donald C. McCallum, M.D.
Indianapolis
Seventh District



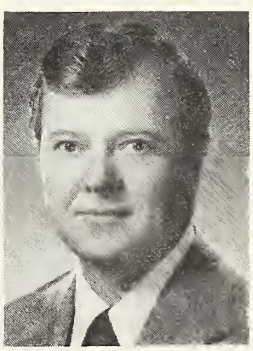
John G. Pantzer, M.D.
Indianapolis
Seventh District



Jack M. Walker, M.D.
Muncie
Eighth District



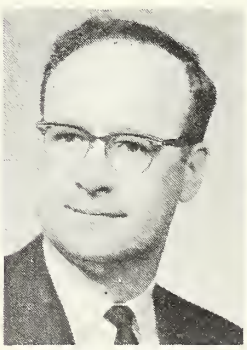
John A. Knote, M.D.
Lafayette
Ninth District



Martin J. O'Neill, M.D.
Valparaiso
Tenth District



Herbert C. Khalouf, M.D.
Marion
Eleventh District



Alvin J. Haley, M.D.
Fort Wayne
Twelfth District



Donald S. Chamberlain, M.D.
South Bend
Thirteenth District

Alternate Trustees



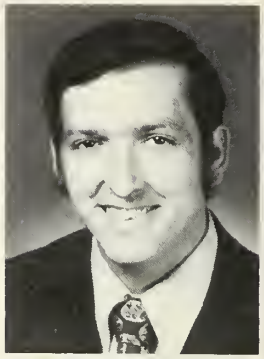
E. DeVerre Gourieux, M.D.
Evansville
First District



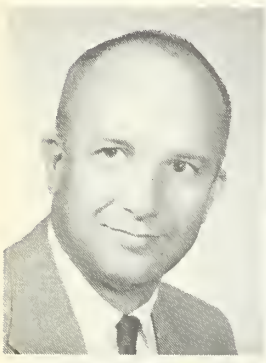
Edgar R. Cantwell, M.D.
Vincennes
Second District



Richard G. Huber, M.D.
Bedford
Third District



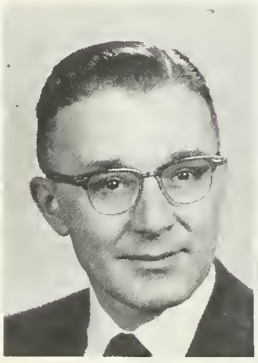
Mark M. Bevers, M.D.
Seymour
Fourth District



William G. Bannon, M.D.
Terre Haute
Fifth District



Dan W. Hibner, M.D.
Richmond
Sixth District



I. E. Michael, M.D.
Indianapolis
Seventh District



Gerald J. Kurlander, M.D.
Indianapolis
Seventh District



Ted S. Doles, M.D.
Middletown
Eighth District



Max N. Hoffman, M.D.
Covington
Ninth District



Leonard W. Neal, M.D.
Munster
Tenth District

Fred C. Poehler, M.D.
La Fontaine
Eleventh District



Franklin A. Bryan, M.D.
Fort Wayne
Twelfth District



John W. Luce, M.D.
Michigan City
Thirteenth District

Delegates to the AMA



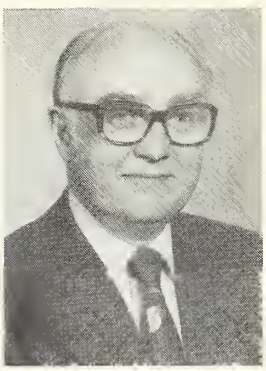
George T. Lukemeyer, M.D.
Indianapolis



Malcolm O. Scamahorn, M.D.
Pittsboro



Ross L. Egger, M.D.
Daleville



Patrick J.V. Corcoran, M.D.
Evansville

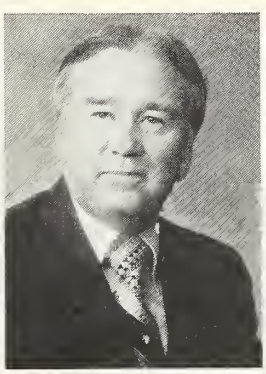


Peter R. Petrich, M.D.
Attica

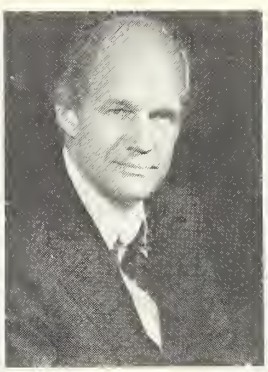
Alternate Delegates to the AMA



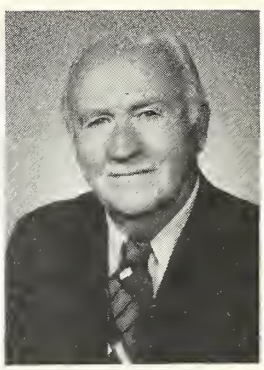
Robert M. Seibel, M.D.
Nashville



Everett E. Bickers, M.D.
Floyds Knobs



Gilhert M. Wilhelmus, M.D.
Evansville



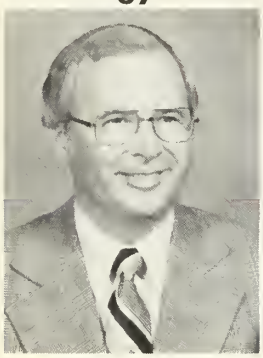
Thomas C. Tyrrell, M.D.
Hammond



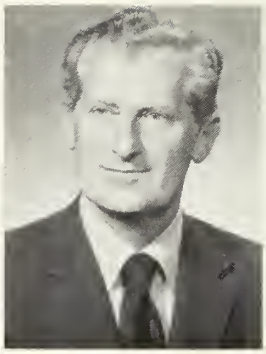
Marvin E. Priddy, M.D.
Fort Wayne

Section Officers

Radiology



William J. Miller, M.D.
Lafayette
Chairman



Wallace Tirman, M.D.
South Bend
Secretary

Pediatrics

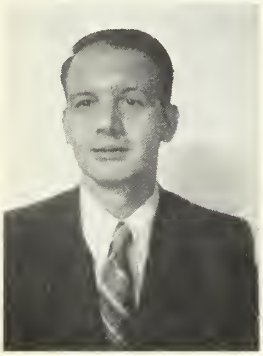


Robert Hannemann, M.D.
Lafayette
Chairman

NO PHOTO AVAILABLE

Stephen E. Bash, M.D.
Fort Wayne
Secretary

Nervous & Mental Diseases



Philip M. Morton, M.D.
Indianapolis
Chairman



Phillip Coons, M.D.
Indianapolis
Secretary

Cutaneous Medicine



William J. Cron, M.D.
Bloomington
Chairman

NO PHOTO AVAILABLE

Ronald H. Doneff, M.D.
Gary
Secretary

Pathology & Forensic Medicine

NO PHOTO AVAILABLE

David E. Smith, M.D.
Indianapolis
Chairman



Emmett C. Pierce, M.D.
Greenfield
Secretary

Directors of Medical Education



Barbara Backer, M.D.
LaPorte
Chairman



Robert Chevalier, M.D.
Beech Grove
Secretary

Section Officers

Surgery

NO PHOTO AVAILABLE

Donald M. Schlegel, M.D.
Indianapolis
Chairman

NO PHOTO AVAILABLE

Ted W. Grisell, M.D.
Carmel
Secretary

Anesthesiology

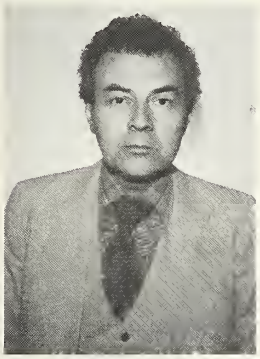


Robert K. Stoelting, M.D.
Carmel
Chairman

NO PHOTO AVAILABLE

Dean Strycker, M.D.
Niles, Mich.
Secretary

Internal Medicine

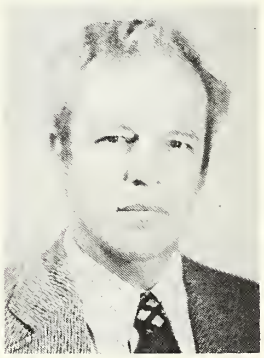


Fred Adler, M.D.
Muncie
Chairman

NO PHOTO AVAILABLE

Douglas H. White, M.D.
Indianapolis
Secretary

Public Health & Prev. Medicine



Robert K. McKechnie, M.D.
Jeffersonville
Chairman

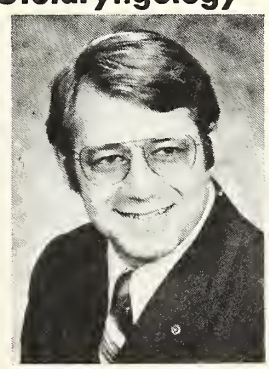
NO PHOTO AVAILABLE

David Edwards, M.D.
Indianapolis
Secretary

Ophthalmology & Otolaryngology

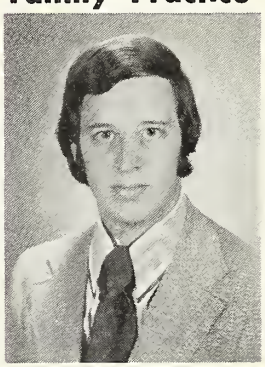
NO PHOTO AVAILABLE

John Bizal, M.D.
Evansville
Chairman



Daniel R. Evans, M.D.
Valparaiso
Secretary

Family Practice



Bernard J. Emkes, M.D.
Indianapolis
Chairman



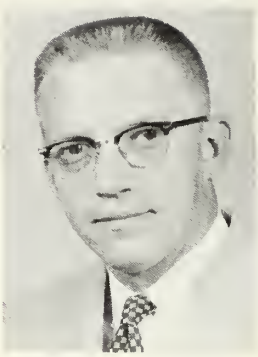
Edwin E. Stumpf, M.D.
New Haven
Secretary

Section Officers

Allergy



Paul D. Isenberg, M.D.
Indianapolis
Chairman



Beaufort A. Spencer, M.D.
Bloomington
Secretary

Emergency Medicine



John C. Johnson, M.D.
Brownsburg
Chairman

NO PHOTO AVAILABLE

Esther Schubert, M.D.
New Castle
Secretary

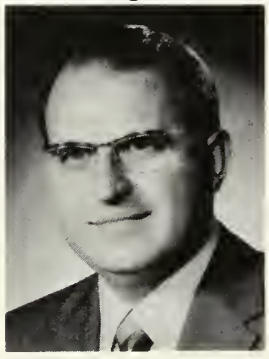
Urology



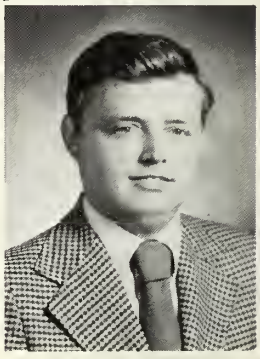
David Schlueter, M.D.
Fort Wayne
Chairman

Vacant
Secretary

Neurological Surgery



Louis W. Conway, M.D.
Lafayette
Chairman



Daniel F. Cooper, M.D.
Indianapolis
Secretary

Orthopedic Surgery



Gilbert Gutwein, M.D.
Lafayette
Chairman

NO PHOTO AVAILABLE

Morris S. Friedman, M.D.
South Bend
Secretary

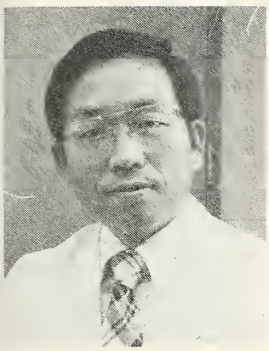
Guest Speakers



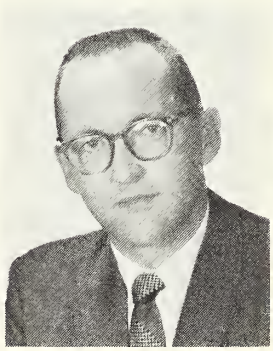
J. WILLIAM WRIGHT, JR., M.D.
Indianapolis
Ind. Acad. of Otolaryngology
Specialty: Otology;
Associate Professor, I.U. School of Medicine;
President-elect, American Council of Otolaryngology;
M.D. degree from University of Michigan.



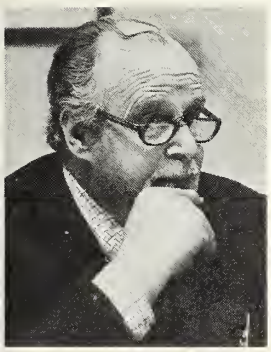
W. DANIEL JORDAN, M.D.
Atlanta, Georgia
Ind. Assn. of AAPS
Specialty: Vascular Surgery;
National president, American Assn. of Physicians and Surgeons;
M.D. degree from Emory University.



HEE-MYUNG PARK, M.D.
Indianapolis
Ind. Acad. of Otolaryngology
Specialty: Nuclear Medicine;
Associate Professor of Radiology, I.U. School of Medicine;
M.D. degree from Severance Medical College, Seoul, Korea.



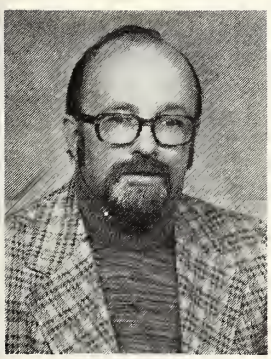
EUGENE D. VAN HOVE, M.D.
Indianapolis
Section on Surgery
Specialty: Radiology;
Associate Radiologist, Chief of Nuclear Medicine,
Methodist Hospital; M.D. degree from University of Nebraska.



PERRY R. AYRES, M.D.
Columbus, Ohio
Impaired Physicians Committee
Clinical Professor of Preventive Medicine,
Ohio State University College of Medicine.
COLUMBUS DISPATCH PHOTO



ROGER A. HURWITZ, M.D.
Indianapolis
Meet the Professor
Specialty: Pediatric Cardiology;
M.D. degree from Northwestern University.



GERALD P. JOHNSTON, M.D.
Indianapolis
Chairman, Impaired Physician Peer Review Committee, ISMA
Specialty: Psychiatry;
M.D. degree from University of Washington.

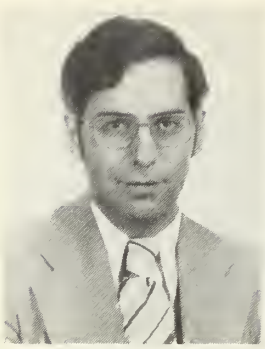


HUGH C. HENDRIE, M.B. Ch.B.
Indianapolis
Meet the Professor
Specialty: Psychiatry;
Albert E. Sterne Professor;
Chairman, Dept. of Psychiatry and Director, The Institute of Psychiatric Research, I.U. School of Medcine; M.B. Ch.B. degree from University of Glasgow, Scotland.

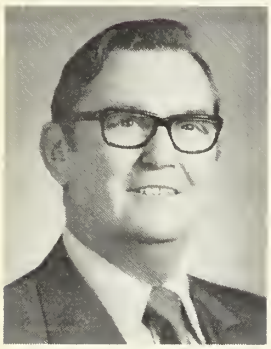
Guest Speakers



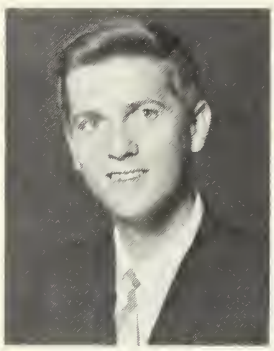
JOHN E. JESSEPH, M.D.
Indianapolis
Meet the Professor
Specialty: Surgery;
Chairman, Dept. of Surgery, I.U. School of Medicine; M.D. degree from University of Washington.



JAMES M. FATTU, M.D., Ph.D.
Evansville
General Scientific Meeting
Specialty: Internal Medicine;
Clinical Asst. Professor, Dept. of Medicine, I.U. Medical School, Evansville branch;
M.D. degree and Ph.D. (Physiology) from Indiana University.



W. THOMAS SPAIN, M.D., Ph.D.
Evansville
Coordinator, General Scientific Meeting
Specialty: Obstetrics and Gynecology;
Director of Medical Education, St. Mary's Medical Center, Evansville;
M.D. degree from University of Minnesota.



JACK H. HALL, M.D.
Indianapolis
General Scientific Meeting
Specialty: Cardiovascular Diseases;
Director, Medical Education, Methodist Hospital;
M.D. degree from Indiana University.



STANLEY M. CHERNISH, M.D.
Indianapolis
Moderator, General Scientific Meeting; Chairman, Convention Arrangements
Specialty: Internal Medicine;
M.D. degree from Georgetown University.



STEPHEN J. JAY, M.D., F.A.C.P.
Indianapolis
Section on Internal Medicine
Specialty: Pulmonary Medicine;
Associate Professor of Medicine, I.U. School of Medicine;
M.D. degree from Indiana University.

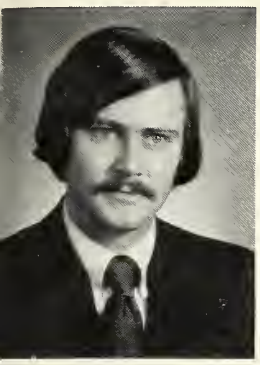


BERNARD E. OPPENHEIM, M.D.
Indianapolis
General Scientific Meeting
Specialty: Nuclear Medicine;
Associate Professor of Radiology, I.U. School of Medicine; Consultant, National Academy of Sciences (BEIR Committee), National Cancer Institute;
M.D. degree from University of Chicago.



R. JOE NOBLE, M.D.
Indianapolis
Section on Internal Medicine
Specialty: Internal Medicine/Cardiology;
Clinical Associate Professor of Medicine, I.U. School of Medicine;
M.D. degree from Indiana University.

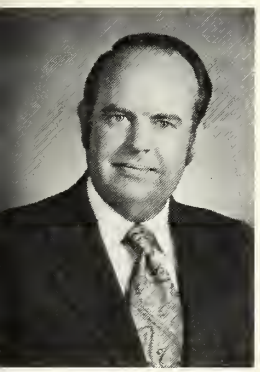
Guest Speakers



JAMES V. FARIS, M.D.
Indianapolis
Section on Internal Medicine
Specialty: Internal Medicine/Cardiovascular Diseases; Asst. Professor of Medicine, I.U. School of Medicine; John B. Hickam Fellow of Cardiology, 1974-75;
M.D. degree from Indiana University.



R. MICHAEL PEARCE, M.D.
Indianapolis
Section on Nervous and Mental Diseases
Specialty: Child Psychiatry;
Asst. Clinical Professor, I.U. School of Medicine;
M.D. degree from Indiana University.



RICHARD C. POWELL, M.D., F.A.C.P.
Indianapolis
Section on Internal Medicine
Specialty: Internal Medicine/Endocrinology and Metabolism;
Professor of Medicine and Biochemistry, I.U. School of Medicine;
M.D. degree from Northwestern University.



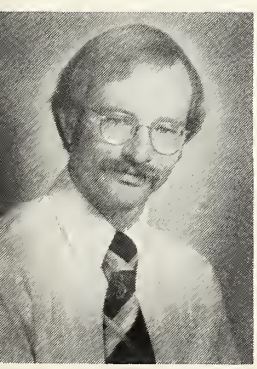
PAUL N. STEWART, M.D.
Indianapolis
Section on Nervous and Mental Diseases
Specialty: Child Psychiatry;
Asst. Clinical Professor, I.U. School of Medicine;
M.D. degree from Indiana University.



JOHN A. GRIEP, M.D.
Indianapolis
Section on Internal Medicine
Specialty: Clinical and Anatomic Pathology;
Professor of Clinical Pathology, I.U. School of Medicine;
M.D. degree from University of Michigan.



VINCENT B. ALIG, M.D.
Indianapolis
Section on Nervous and Mental Diseases
Specialty: Psychiatry;
Associate Professor of Clinical Psychiatry, I.U. School of Medicine;
M.D. degree from Indiana University.



BRYAN T. BURNEY, M.D.
Indianapolis
Section on Internal Medicine
Specialty: Diagnostic Ultrasound;
Clinical Asst. Professor of Radiology, I.U. School of Medicine;
M.D. degree from Ohio State University.

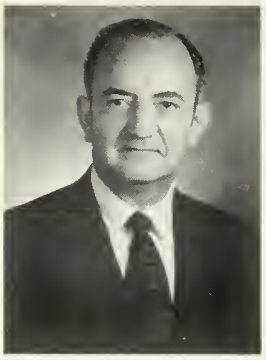


THOMAS G. SLAMA, M.D.
Indianapolis
Family Practice, Emergency Medicine
Specialty: Internal Medicine/Infectious Disease
Consultant in Infectious Diseases, I.U. Medical Center, St. Vincent Hospital and Methodist Hospital;
M.D. degree from Indiana University.

Guest Speakers



BARRY J. MATERSON, M.D.
Miami, Florida
Family Practice, Emergency Medicine
Specialty: Internal Medicine/Nephrology;
Associate Professor of Medicine, University of Miami;
Asst Chief, Medical Service, Miami VA Medical Center;
M.D. degree from University of Miami.



ROBERT L. CAMPBELL, M.D.
Indianapolis
Section on Neurological Surgery
Specialty: Neurosurgery;
M.D. degree from Ohio State University.



CHARLES B. CARTER, M.D.
Indianapolis
Family Practice, Emergency Medicine
Specialty: Internal Medicine/Nephrology;
Director, Renal Transplant Program, Methodist Hospital;
Chairman, Internal Medicine Section, Methodist Hospital;
M.D. degree from Medical College of South Carolina.



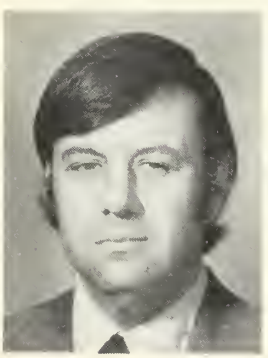
JULIUS M. GOODMAN, M.D.
Indianapolis
Section on Neurological Surgery
Specialty: Neurosurgery;
Asst Clinical Professor of Neurosurgery, I.U. School of Medicine;
Director of Neuroscience Education, Methodist Hospital;
M.D. degree from George Washington University.



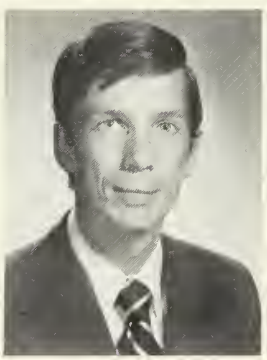
FRANK VINICOR, M.D.
Indianapolis
Family Practice, Emergency Medicine
Specialty: Internal Medicine/Endocrinology;
Associate Professor, Dept. of Medcine, I.U. School of Medicine;
M.D. degree from Washington University.



MICHAEL R. BURT, M.D.
Indianapolis
Section on Neurological Surgery
Specialty: Neurosurgery;
M.D. degree from Indiana University.



JOSEPH F. FITZGERALD, M.D.
Indianapolis
Section on Neurological Surgery
Specialty: Pediatric Gastroenterology;
Director, Gastrointestinal Disease Section, Dept. of Pediatrics, I.U. School of Medicine; Professor of Pediatrics, I.U. School of Medicine; M.D. degree from Indiana University.



ROBERT M. WORTH, M.D.
Indianapolis
Section on Neurological Surgery
Specialty: Neurosurgery;
M.D. degree from Indiana University.

Executive Director

In making this report, my fourth to the House of Delegates and members of ISMA, I am pleased to relate that the financial condition of the Association remains sound, as documented in recent operating statements. More detailed information on Association finances will be presented by the Treasurer at the annual meeting.

Happily, ISMA membership continues to increase while expenses for the most part have been contained close to budget. The impact of inflation is becoming more pronounced as it gradually erodes the build-up of our liquid operating reserves. Inflation has become a major drain on all organizations, but it is particularly difficult for non-profit associations like ISMA whose revenue base is not tied to economic trends. Inflation has a double effect on medical organizations, one putting upward pressure on dues and the other putting downward pressure on membership as individual physicians respond to higher dues.

At the time of this writing a preliminary budget for the 1979-80 fiscal year is still under development. Nevertheless, the Association should be able to struggle through another year without a dues increase despite inflationary pressures. Also, during the forthcoming fiscal year, ISMA will make the transition to a functional budgeting-accounting system that will much more accurately relate activities and programs to costs.

It is interesting to note that AMA membership is up significantly for 1979. This is the first time it has shown an increase in 15 years, as it has been gradually eroding since the early 1960s. Based on conversations with physicians throughout the state, the most important factor responsible for the increase in AMA membership this year was the adoption of Resolution 62 (Florida) at the AMA Interim meeting in December 1978, which precluded the sponsorship by AMA of a National Health Insurance Bill.

Despite the fact that 1979 is not an election year, IMPAC membership and contributions are considerably higher than last year. A strong PAC is the basis for the success of any legislative program and therefore we hope that more medical families will see fit to lend IMPAC their support.

The outgoing ISMA president in his speech to the House of Delegates last year expressed concern over the partisan flavor of IMPAC and recommended that its structure be reviewed. As a result, a joint committee of IMPAC and the ISMA Board of Trustees met to discuss IMPAC, and the recommendations that emanated from this meeting will be presented to the Board of Trustees. Perhaps one of the most important recommendations emerging from these discussions is that the Board of Trustees be more judicious in selecting nominees to the IMPAC Board.

After considerable study of numerous alternatives, the Board of Trustees authorized the purchase of the former Royal Globe building at 3843-45 N. Meridian (four buildings to the south of ISMA headquarters) as the least expensive way of acquiring additional space. The entire top floor of the building has been remodeled and leased to The Associates. A portion of the lower level has been leased and most of the remaining space will be used to accommodate the transfer of I-MEDIC, plus the ISMA membership program and Jail Project from the headquarters building. This will minimize remodeling and eliminate the need for construction in the headquarters building while ensuring the most efficient use of all available space.

Rather than retain the services of an outside public relations firm, the Board of Trustees directed that a full-time staff director of public relations be hired instead. Barbara Lauter joined the ISMA staff in May 1979, and is planning many projects, one of which is the establishment of a statewide network of spokespersons composed of knowledgeable physicians capable of espousing medicine's posture on the important issues. Contacts with the media are being improved and with this increased staff capability ISMA's public relations efforts should take on a more positive and aggressive orientation.

With Bob Amick's retirement, Mike Huntley's elevation to Special Assistant to the Executive Director, and Mark Miles' departure, Howard Grindstaff is now Field Services Coordinator for the entire state. He has also taken on responsibility for staffing IMPAC. Ed Raffensperger, staff person responsible for continuing medical education, has resigned due to ill health and Beckett Shady has assumed the CME responsibility as an added function.

In an effort to strengthen the Association's relationships with the Auxiliary, Rosanna Iler will serve as staff coordinator to the Auxiliary. Mrs. Iler will attend all important meetings of the Auxiliary and provide administrative support.

The Indiana State Medical Association's legislative efforts during the 101st General Assembly were very successful. ISMA-sponsored legislation met with favorable action by both the Indiana House and Senate. The Indiana House filed and considered more than 1,100 bills and the Senate more than 500 bills. The ISMA Legislative Commission reviewed and watched over 100 medically related bills. A legislative wrap-up was included in the April issue of *ISMA Reports*.

The Association supported various amendments embodied in HB 1656 to the Medical Malpractice Act (PL 146). The most important change permits either the defendant or plaintiff access to the courts regarding issues of law and discovery prior to the rendering of a medical panel opinion. The Medical Malpractice Act was further expanded to explicitly cover professional corporations. The Malpractice Study Commission, under the chairmanship of Dr. Gilbert Wilhelmus, was also continued.

It is interesting to note that approximately 525 malpractice claims have been filed since 1975 where the alleged incidence occurred after the effective date of the Act (PL 146). The State's Patient Compensation Fund has a current balance of well over $9 million, out of which some $425,000 has been paid.

The Association also supported amendments (HB 1852) to the Medical Practice Act, which would permit a physician to obtain an inactive license and pay only half of the regular registration fee. To become eligible for the inactive license, the physician cannot continue an office practice nor charge for his or her services. Additionally, the Act now permits the Medical Licensing Board to revoke a physician's license in Indiana for acts committed in other jurisdictions if those acts are prohibited in Indiana. A certified transcript of the administrative or judicial proceedings will be sufficient to revoke the license. The physician will retain his due process rights to appeal the board's decision. The bill was passed by both houses and signed by Governor Bowen.

The ISMA increased the tempo of its surveillance of federal activities by submitting comments on numerous federal bills and proposed regulations. Of particular concern is the trend toward very general legislation that is subject to misinterpretation by government agencies empowered to write the regulations for implementation. The bureaucratic regulation writing process is more difficult to influence than the actual legislation itself because it is less sensitive to the normal forces of a representative, democratic system. In essence, the bureaucracy often referred to as the fourth estate is somewhat insulated. Some members of Congress have recognized this problem, such as Indiana Congressman Lee Hamilton, and have introduced legislation that would provide for legislative veto of bureaucratic regulations.

It is critical that medicine present a united front to combat such abuses of our legislative system. Divide and conquer is one of the most serious strategic threats to the medical profession. Ultimately, the most potent force that organized medicine can develop to combat undesirable regulation is a strong membership base. If medical organizations can coalesce, even while maintaining organizational individuality, a unified voice can make itself heard and have greater impact.

Legal challenges to the profession as a whole and to the relationships between medical organizations have increased in the past several years. A major effort has been launched by the Federal Trade Commission to undermine the basis of professionalism in medicine. AMA has vigorously opposed those efforts, but they will continue to be a major concern.

At the same time, there have been legal challenges to the relationships between medical organizations that have the effect of destroying the basis for cooperative and united action. The most recent example of this is the case currently pending in Arizona that challenges the unified structure of the American Dental Association. This particular case, which could have a significant impact on our medical federation structure, is scheduled to go to trial this fall. In referring the case to the District Court for trial, the Circuit Court of Appeals stated that the requirement of "tying" relationships (to join the State Dental Association, a dentist also must join the ADA) raises a question of antitrust violation. The District Court must determine whether the defendants (the dental associations) can show that an exercise of such "restraint of trade" is in the public interest. A decision against the defendants could mean that all levels of such "tied" organizations must henceforth become totally independent of all other levels if in any way an individual is forced to join one organization in order to join another. This case is but one of several in recent years that challenges the so-called "tying" concept. Even if this challenge is not successful, it is almost certain there will be others.

Like Indiana, most states are experiencing a shortage of bedside nurses in addition to efforts by organized nursing to expand their scope of practice. The latter problem is particularly vexing. Physicians have to be concerned about these problems because physicians are dependent upon nurses to extend care to their patients.

Responsibility for the shortage of nurses rests with the nursing profession. Nursing is presently in a state of turmoil over the matter. Nursing's two major organizations—the National League for Nursing (NLN), which refers to itself as the "leadership" group and program accrediting body, and the American Nurses Association (ANA), which regards itself as the "professional" association and collective bargaining organization—have been at loggerheads over the issues of education, training and credentialing ever since ANA declared in 1965 that hospital-based diploma programs and practical nursing programs should be phased out and that baccalaureate degrees from institutions of higher education should be the minimum requirement for entering "professional" nursing practice. Last year the ANA gave a sense of urgency to its goal of "professionalizing" the nursing profession when it set deadlines. It declared 1985 as the target date for implementing this major overhaul of the American nursing education and service system requiring stepped-up legislative activity to change nurse practice acts state by state.

During the past 15 years or so, most large hospitals have cooperated with organized nursing and phased out their hospital-based diploma training programs on the premise that the university-based schools of nursing would produce adequate numbers of so-called "professionally prepared" nurses. Unfortunately, this has not happened since the majority of those nurses prepared at the baccalaureate, masters, and doctorate levels wind up functioning as administrators and not as bedside nurses where the need is greatest.

A comprehensive 10-year strategy for HMO development was announced at the 1979 HMO National Policy Conference held in Washington, D.C. in February. According to DHEW, a "cost-containment HMO development strategy" was selected after considering several other objectives such as maximizing the number of operational HMOs and/or maximizing total national HMO enrollment. Under the cost-containment strategy, DHEW will place a high priority on starting and expanding HMOs in "high-medical-care-cost" cities.

The development strategy aims first at 20 cities with the highest health costs, next at 19 metropolitan areas experiencing very high growth rates and finally at an additional 22 large communities with above-average costs. The only Indiana city included in DHEW's list of target locations is Indianapolis, listed as a third priority for HMO development because of its "above-average costs."

The DHEW plans three types of HMO activity: (1) expansion of existing HMOs: (2) development of new HMOs; and (3) conversion of fee-for-service group practices, medical centers and hospitals into some form of HMO. According to the DHEW strategy, group model HMOs will have a priority under the cost-containment plan, but IPAs also are included in the development plan because of their much lower start-up costs.

At the 1978 AMA Annual Convention, the House of Delegates approved the concept of neutral public policy and fair market competition among all systems of health care delivery, and requested an objective assessment of HMOs, including IPAs and other group arrangements, with respect to their impact on access, quality, and cost of health care. This objective assessment is now being conducted by the AMA under the direction of the Council on Medical Service. The AMA-HMO Project calls for: (1) a review of the literature; (2) HMO site visits; and (3) a final report to the House of Delegates in December 1979.

Advances in medical technology and technique are happening so fast that it is difficult for scientists and practitioners to keep up with new developments and their proper use. Progress carries with it problems, and many of the issues confronting medicine today have grown out of advances in the recent past. Bioethical issues relating to abortion and the legal definition of death are two of the more dramatic examples. Another is the balance between the higher quality of care that results from new technology and the higher cost that goes along with it. The impact of technology on the process of delivering personal medical care becomes an issue as more and more specialization becomes necessary in order to utilize the more sophisticated technology. And the time demands on practitioners become excessive as they try to trade off between time with patients and time to keep abreast. These are all issues that the entire medical profession faces and is expected to resolve.

Finally, a word about ISMA goals and objectives. At the 1978 annual meeting the House of Delegates adopted a report of the Future Planning Committee which set forth goals and objectives for the Association to pursue. While no specific progress report has been prepared, a perusal of the various reports of commissions and committees contained in this issue of THE JOURNAL provides ample evidence that substantial progress has been made with respect to each of the goals and objectives cited.

Donald F. Foy
Executive Director

AMA Delegation

Interim Meeting: December 3-6, 1978*

The American Medical Association House of Delegates convened in Chicago, December 3 through 6 with a full contingent of Indiana State Medical Association delegates and alternate delegates in spite of a vicious winter storm which delayed arrivals in the Chicago area for a number of the delegation.

As directed by the Board of Trustees, the delegation presented a late resolution to the AMA Committee on Rules and Order of Business and the resolution was accepted for presentation. Entitled "Government Intrusion into Confidentiality of Medical Records," the resolution was directed toward a ruling by the general counsel to the Department of Health Education and Welfare which stated that HEW had the authority to collect Uniform Hospital Discharge Data Set (UHDDS) on non-federal patients under Public Law 95-142: the Medicaid/Medicare Anti-Fraud Abuse Act, Section 19.

The Indiana resolution asked that the American Medical Association (1) investigate the decision by HEW legal counsel which would allow such access to all data (2) investigate the implications of release of medical information under the UHDDS which would be a violation of traditional medical practice and (3) immediately request the Department of HEW to withdraw any proposed plan to collect this information.

Testimony in Reference Committee A from throughout the country strongly supported the Indiana resolution.

Collection and use of this data must remain a local responsibility, according to a statement approved by the AMA House.

(The UHDDS is part of the required standard data set collected by the PSROs. This data set includes patient identification, admission and discharge dates, attending and operating physician identification, diagnoses, etc. Presently, PSROs report the data to HEW on a quarterly basis, omitting the patient and practitioner identifiers. Earlier this year, HEW indicated that UHDDS might be collected through fiscal intermediaries and agents, rather than through PSROs.)

In a report on PSRO data collection and management, the House said AMA will continue to negotiate with HEW to assure that PSROs have a continuing role in the maintenance of control over confidential data containing individual patient and physician identifiers access to an employee-patient personal medical record without the employee's specific permission.

In another action, the delegates voted to oppose access to an employee-patient personal medical record without the employee's specific permission.

The House also asked the AMA Board of Trustees and the Council on Medical Service to study and report on the effects of state statutes that provide patients access to information contained in their medical records, with particular attention to the effects on the physician-patient relationship, patient care, patient compliance with therapeutic programs, and the incidence of professional liability litigation.

Chiropractic Suit: In an unusual move the American Medical Association House of Delegates closed its doors to outsiders to debate the chiropractic issue.

At conclusion, delegates voted their approval of the AMA settlement of a suit involving chiropractic in Pennsylvania.

At the core of the debate was the position organized medicine should take toward chiropractic.

Dr. George T. Lukemeyer conveyed Indiana's feeling over the settlement. "We think chiropractic is an unscientific cult, and a hazard to rational health care," he said, adding that he feared the house action could be misinterpreted as acceptance of chiropractic.

Following is the substitute resolution on chiropractic litigation adopted by the AMA House of Delegates during the Interim Meeting:

Resolved that:

1. The AMA support the right of a physician to choose those persons whom he or she will accept as patients and also to exercise his or her choice by the terms of contractual arrangements with other physicians, medical groups, hospitals, and other institutions.

The AMA will continue to support a physician's right to freely choose those whom he will serve in the absence of legal considerations to the contrary.

2. The obligations which a physician has to provide information to a patient or any other party are those requested by customary good medical practice and law.

3. The Judicial Council be requested to reconsider Article 3.70 of Section III of Judicial Council Opinions and Reports.

4. The AMA continue to warn the public of the hazards to health of entrusting the diagnosis and treatment of diseases such as cancer, diabetes, malignant hypertension, cardiovascular stroke, and infections to practitioners who, in the treatment of these conditions, rely upon the theory that all disease is caused by misalignment of spinal vertebrae and can be cured by manual manipulation of the spine.

5. The authority of the AMA Board of Trustees to have made and to have agreed to the proposed settlement in the Slavek case be acknowledged and affirmed.

6. Nothing in the above five items should be interpreted or construed as an amendment to the Principles of Medical Ethics of the AMA.

Mandatory Second Opinions: The AMA opposed the concept of mandatory second opinions or the imposition of financial penalties by a third-party payer for not obtaining a second opinion.

In a report on second surgical opinions adopted by the house, the delegates also reaffirmed policy that supports the concept that, when a second opinion is required by a third-party payer, that opinion should be at no cost to the patient. The delegates also reaffirmed the right of a patient or a physician to seek a second opinion freely from any physician of his/her choice.

Comprehensive Health Insurance: AMA has cut back its 10-year commitment to comprehensive health insurance for all Americans in favor of a limited approach targeted toward covering the uninsured and providing insurance against catastrophic costs.

At the same time, however, the organization reaffirmed its commitment to retain a strong voice in the debate over how best to meet America's health care needs.

By a 160-86 vote, the AMA House of Delegates turned down the recommendation of the Association's board and Councils on Legislation and Medical Service that AMA introduce into Congress early next year the "Health Insurance Improvement Act of 1979." This proposal would have marked the ninth consecutive year the AMA has had before Congress a bill to provide basic health insurance benefits for all Americans, and the reference committee urged the house to approve it, citing that, "It is essential for the Association to continue to have before the Congress in the interest of the public a proposal offering a private sector approach building on the strength of our present health care delivery system."

The House, however, rejected this call and endorsed a resolution from Florida outlining four principles that the As-

*Report of the ANNUAL MEETING, JULY 23-26, 1979, will be distributed at the FIRST MEETING of the HOUSE OF DELEGATES.

AMA Delegation

sociation should recommend to Congress to modify the present system. The house stipulated that the board should introduce a legislative bill "only if necessary" and limited "only to the four points." At the same time, delegates said they did not want to tie the hands of their elected officers and staff who must deal with the day-to-day complexities of the NHI debate.

The four Florida principles include:

"Requiring minimum standards of adequate health benefits in all health insurance policies sold in the U.S., with appropriate deductibles and co-insurance.

"A simple system of uniform benefits provided by the federal, state, and local governments for those individuals who are unfortunate enough (through no fault of their own, i.e. age, disability, financial hardship) not to be able to provide for their own medical care.

"A nationwide program by the private insurance industry of America (and government if necessary for reinsurance) to make available catastrophic insurance coverage for those illnesses and individuals where the economic impact of a catastrophic illness could be tragic. All catastrophic coverage should have appropriate deductibles and co-insurance to make it economically feasible to avoid abuse.

"A program developed pursuant to these principles should be administered at the state level with national standardization through federal guidelines."

FTC Ruling—Advertising: The nation's physicians are risking "professional suicide" if they allow themselves to become divided over chiropractic issues, warned Tom E. Nesbitt, M.D., AMA president.

Such a split in organized medicine could even hamper the Association's efforts to fight "tooth and nail" the recent Federal Trade Commission's ruling that charged the AMA with restraint of physician advertising, Dr. Nesbitt said in his opening address.

"We intend to employ every weapon at our command, legal or legislative, to fight this ruling. If necessary, we'll take our case to the Supreme Court," said Dr. Nesbitt about the recent FTC order to eliminate most restrictions on physician advertising, solicitation, and any relevant provision in the AMA's Principles of Medical Ethics and Constitution and Bylaws. The order also applied to the Connecticut State Medical Society and the New Haven Medical Assn., Inc.

Voluntary Effort: Physicians should voluntarily restrain their fee increases over the next two years, states a report adopted by the House of Delegates.

In a series of actions aimed at curbing costs, the House:

- Urged hospital medical staffs to establish standing committees to provide recommendations for cost containment without compromising quality care.
- Encouraged hospitals and their medical staffs to review standing orders with a goal of minimizing tests performed.
- Asked government to contain health care costs by reducing the number of regulations and requested the American Hospital Assn. to encourage hospitals to identify those costs associated with federal regulations and legislation, and to publicize these findings.
- Encouraged experimentation with regional centers for high cost, specialized technology, where opportunities for improved quality or availability of care and for cost savings exist.
- Strongly encouraged expanded study by the health insurance industry of the effects of cost-sharing of benefits on both consumer and provider behavior, with the goal of enabling more effective and efficient benefit design.
- Adopted the position that private and government insurance benefit packages should be adjusted to provide balanced coverage of alternative services and settings in the provision of health care.
- Urged all physicians, when admitting patients to hospitals, to send pertinent abstracts of the patients' medical records so that the hospital physicians sharing in the care of those patients can practice more cost effective and better medical care.
- Supported the concept that medical expenses should be treated uniformly for federal income tax purposes.
- Referred to the AMA Board of Trustees a request that a study be conducted by consultants to compare the cost of medical care in the public and private sectors.

Continuing Medical Education: The AMA House endorsed accreditation of state-wide continuing medical education (CME) programs by state medical groups.

The action was seen as a step toward ending confusion over whether state medical associations have the power to accredit CME programs within state borders.

A resolution adopted with little discussion by delegates to the Interim Meeting says that the AMA affirms "the concept of accreditation of continuing medical education by state medical associations whose continuing medical education standards meet American Medical Association or Liaison Committee on Continuing Medical Education (LCCME) continuing medical education standards."

Physician's Assistants: The physician's right to delegate medical functions to allied personnel who work under his supervision, direction, and responsibility was reaffirmed by the AMA House.

In adopting a progress report on new health practitioners, the delegates said that such reaffirmation is "highly appropriate and particularly needed" if physicians are to be able to use such newer categories of health personnel as physician's assistants flexibly and effectively.

Medicare Claim Data: The AMA will encourage federal legislation authorizing physicians to have access to claim payment information on Medicare patients.

Delegates adopted a resolution specifying that such legislation authorize physicians "to receive copies of all communications sent by Medicare fiscal intermediaries to the physicians' patients regarding medical services rendered and reimbursement allowed, whether or not the physicians accept assignment as defined in the Medicare statute."

The resolution is intended to resolve present interpretations of the Freedom of Information Act and federal regulations, which prohibit Medicare from giving the treating physician information about claim payments made directly to the patient, so that the physician can take steps to settle the account.

Other House Actions: In other actions the House:

- Recommended that results of experiments with new forms of providing care in which providers must exercise discretion in ordering treatment or absorb a portion of the costs themselves be fully evaluated before wider application of this concept is considered.
- Referred to the board a resolution asking the AMA to oppose any reduction of the usual and customary fees of non-salaried private physicians by Part B Medicare carriers regardless of how or on what service the patient is admitted be it teaching or otherwise.
- Adopted a resolution recognizing that medical and health care costs have increased in part because of the increased demand for services as a result of third-party payment, the number of regulations generated by federal and state agencies, professional liability insurance premiums, and because of deficit spending by the federal government.
- Adopted a report on deregulation of the medical profession, noting that when the 96th Congress convenes in January, action will be initiated to reintroduce the AMA bill to require that federal agencies include financial impact

statements in all regulations and programs that they propose.

● Adopted and referred to the Board of Trustees a proposed amendment of the bylaws that would provide a medical student a non-voting position on the Council on Scientific Affairs.

Arvine G. Popplewell, M.D.
President, and Chairman, AMA Delegation

Treasurer

An unaudited report of the financial condition of the Association as of Sept. 30, 1979, will be made available to the reference committee prior to the annual meeting. As was done last year, I am presenting an unaudited report of the financial condition as of June 30, 1979, and for comparison, the figures from the Sept. 30, 1978, audit.

As of June 30, 1979, expenses overall were well within budget.

Joseph F. Ferrara, M.D.
Treasurer

Executive Committee

The Executive Committee meetings have been held monthly and more often when needed if emergencies arose. Every effort has been made to define the duties of the Executive Committee and carefully avoid any decisions, other than housekeeping, which could be made by the Board. All members attending have been most cooperative, and I have once again been impressed by that great teacher—experience.

Paul W. Holtzman, M.D.
Chairman

INDIANA STATE MEDICAL ASSOCIATION

Statement of Financial Condition

ASSETS

	6/30/79	9/30/78
GENERAL FUND:		
Cash on deposit	$ 62,278	$ 108,329
Investments at cost:		
U.S. Treasury Bonds-long term	60,101	60,101
U.S. Treasury Bills, Money Market Certificates-short term	1,164,591	910,087
Stock in I-MEDIC	5,000	—
Accrued interest receivable	30,469	21,322
Accounts receivable	66,618	13,874
Prepaid expenses	15,663	11,222
Office furniture and equipment net of depreciation	28,250	23,674
	1,432,970	1,148,609
BUILDING FUND:		
Cash on deposit	4,059	3,556
U.S. Treasury Bills	182,999	310,123
Prepaid and deferred expenses	1,480	239
Property:		
3935 N. Meridian Street:		
Land	69,188	69,188
Building and improvements-net of depreciation	246,457	212,040
Adjacent office property-net of depreciation	21,067	22,500
Rental property-net of depreciation	30,210	30,943
3845 N. Meridian Street:		
Land	40,000	—
Building and improvements-net of depreciation	127,234	—
	722,694	648,589
STUDENT LOAN FUND:		
U.S. Treasury Bills	19,190	19,190
Money Market Certificates	20,810	20,810
	40,000	40,000
MEDICAL EDUCATION FUND:		
Investments	375,636	414,209
	375,636	414,209
	$2,571,300	$2,251,407

LIABILITIES AND FUND BALANCES

	6/30/79	9/30/78
GENERAL FUND:		
Accounts payable	$ 11,750	$ 13,133
Accrued taxes	—	1,095
Dues payable to AMERF	22,405	22,440
Dues payable to Counties, Districts, AMA	4,533	—
Unearned portion of current year dues	390,803	195,804
Deferred annual meeting income	5,250	10,625
Other deferred income	—	2,320
Fund balance	998,229	903,192
	1,432,970	1,148,609
BUILDING FUND:		
Accounts payable	1,815	1,044
Accrued taxes on rental properties	7,400	931
Damage deposits	685	185
Mortgage payable	57,889	—
Fund Balance	654,905	646,429
	722,694	648,589
STUDENT LOAN FUND:		
Fund balance-principal balance appropriated from General Fund	40,000	40,000
	40,000	40,000
MEDICAL EDUCATION FUND:		
Committed to Indiana University Medical School	375,636	414,209
	375,636	414,209
	$2,571,300	$2,251,407

Chairman, Board of Trustees

The Board of Trustees took the following actions in 1978 and 1979:

Organizational (ISMA Inside)

1. Agreed the President-elect, Dr. Arvine G. Popplewell, was to succeed to the presidency to fulfill Dr. Harshman's term in 1978 and 1979 and fill his own term in 1979 and to end in 1980.

2. Agreed that the immediate past president (Dr. Goodman) should continue in that position until 1980 when Dr. Popplewell would succeed into the immediate past president position.

3. Elected a member at large to the Executive Committee to fulfill Dr. Harshman's place (Martin J. O'Neill, M.D.).

4. Agreed that Dr. Harshman's delegate role should be filled as selected by the delegation (George T. Lukemeyer, M.D.) until the 1979 House of Delegates.

5. Advised that the order of succession be clarified in ISMA Bylaws by the Commission on Constitution and Bylaws.

6. Recommended to the Policy Committee the creation of the position of vice-chairman of the ISMA Board of Trustees and that such recommendation be submitted to the Commission on Constitution and Bylaws.

7. Approved the delegation's selection of Dr. George Lukemeyer to fill Doctor Harshman's AMA delegate position as above.

8. Approved full-time Public Relations Director and a public relations program (fiscal note $49,000) and participated with the Commission on Public Relations and the staff in the selection of Barbara Lauter to fill the Director of Public Relations position.

9. Called for a separate report to the House of Delegates in 1979 for a full accounting of public relations activities (to be separate from the Public Relations Commission's report).

10. Approved the Blue Shield full service and major medical plans for ISMA members (Plan A and B).

11. Requested staff to present periodic reports concerning implementation of "ISMA Goals and Objectives."

12. Asked ISMA to assume fiscal responsibility for district stationery (if the ISMA district is interested).

13. Asked the Impaired Physicians Committee to prepare a resolution concerning substance abuse for the 1979 ISMA House of Delegates.

14. Suggested that THE JOURNAL advertising policy be reformulated or restated.

15. Proposed that THE JOURNAL Editorial Board and the ISMA Board hold a brief joint meeting for presentation of the Sandoz Award to THE JOURNAL.

16. Requested that the staff elicit necessary mileage and automotive fuel needs from ISMA members in order to motivate economy in fuel consumption and to develop parameters of automotive fuel needs for Indiana physicians.

17. Approved amicus curiae in two tests of Public Law 146 (malpractice).

18. Approved development of a scientific program on impaired physicians to be presented at the annual convention.

19. Recommended that ISMA president, with the recommendation of the Auxiliary president, appoint two Auxiliary members to the Committee on Impaired Physicians.

20. Recommended procedure for the formation of an ISMA insurance company by directing the Subcommission on Insurance to proceed with a formal feasibility study, and directed that the results of the study be sent to the ISMA membership and be presented at the October meeting of the House of Delegates in 1979. Further directed that actual incorporation of the insurance company be postponed until the House of Delegates acts on the matter.

21. Requested staff to inquire as to the feasibility of lower malpractice insurance rates for the State of Indiana.

ISMA Outside Activities

1. Named three practitioners under age 45 who are Association members to attend the Washington visitation. They were Michael Controy, M.D., Donald J. Kerner, M.D., and L. Ray Stewart, M.D.

2. Asked the chairman of the Executive Committee to evaluate the benefits of the policy of taking these young members on the Washington visitation.

3. Monitored the selection of a new state health commissioner and supported Dr. Blankenbaker's candidacy for this position.

4. Recommended Dr. Beeler and Dr. Butler to the Blue Shield Nominating Committee and endorsed the ISMA Districts' recommendations for district representation.

5. Met with IMPAC to study ISMA-IMPAC inter-relationship.

6. Agreed to participate in the I.U. School of Medicine's "The Art of Medicine" program.

7. Pursued information on Indiana hospitals not qualified under P.L. 146 (malpractice) and notified members in *ISMA Reports.*

8. Nominated 10 (Executive Committee selected five) for a committee to "determine the scope of chiropractic."

9. Transmitted the Ad Hoc Committee on Laboratory Tests Determinations to the Mutual Medical Insurance Company.

10. Notified (again) Blue Shield that the ISMA finds publication of "participating vs non-participating" closed panels highly objectionable.

Interface with Government Agencies

1. Opposed generics substitution in the MAC program of Medicaid.

2. Sent letters critical of the HSAs (written by Dr. Manifold) to Senators Lugar and Bayh.

3. Reported the number of telephone calls to the Blue Cross-Blue Shield second opinion number as being eight legitimate calls in a two-month period.

4. Sent a letter of transmittal to HEW stating that ISMA members felt the Area IV PSRO was not representative of the physicians in that area.

5. Opposed National Health Insurance (better named tax) but might be receptive to certain (private sector) catastrophic coverage plans if they are properly developed.

6. Opposed "governmental intrusion in confidentiality in medical records."

7. Recommended that physicians on HSAs technical committees be "board certified or otherwise qualified by experience and training."

8. Opposed Certificate of Need legislation.

9. Secured legal opinion concerning the position of insurance committees of county medical societies in view of FTC interpretations and transmitted this opinion to county medical societies.

10. Established that national legislative issues be considered as a permanent agenda item for all future Board meetings.

11. Oppose any recommendations which would result in increased health care costs.

12. Objected to Medicaid "30-day notification for tubal sterilization" regulation and requested the Insurance Subcommission to continue to work for rescinding this regulation.

AMA Federation Activities

1. Supported the AMA position for continued use of the CPT-4 (Current Procedural Terminology) (HEW mandates International Classification of Diseases, Ninth Revision).

2. Supported Frederick L. Schoen, M.D., for a position on AMA Council on Long Range Planning and Development.

3. Reaffirmed ISMA position that the AMA retain its present "Principles of Medical Ethics."

Paraprofessional Activity

1. Referred to the Committee on Medical Education the matter of unprofessional actions of paraprofessionals.

2. Asked the Commission on Medical Education to develop a policy statement regarding independent practice of nurses and the Committee on Legislation to take action dealing with relevant legislation. (When a nurse is acting as a paraprofessional he/she should act under the Medical Practice Act rather than the Nurse Practitioner Act.)

3. Opposed independent practice of nurses.

Policy

1. Withdrew the former HMO policy; established a new HMO policy.

2. Established a policy on patient-physician relationship.

Resolutions from the 1978 House of Delegates

All 1978 resolutions and actions from the House of Delegates were reviewed—referred to appropriate commission and/or committee for implementation and/or recommendation and report back.

Resolution 78-1, creating a specialty section of medical directors and staff physicians of nursing facilities—referred to Constitution and Bylaws Commission.

Resolution 78-3, funds for board of medical licensure—referred to legal counsel and Commission on Legislation.

Resolution 78-6, creation of ISMA spokesperson—endorsed the Executive Committee's suggestion that the staff present recommendations for the Executive Committee's deliberation.

Resolution 78-7, medical student component society—referred to the Commission on Constitution and Bylaws and to the Commission on Medical Education for their information and for transmittal to the Indiana University student council.

Resolution 78-8, uniform health insurance claim form—referred to the Subcommission on Insurance.

Resolution 78-9, admission to AMA programs and seminars—referred to the Indiana Delegation to the AMA.

Resolution 78-10, speaker and vice speaker of the House in the AMA delegation—endorsed the Executive Committee's recommendation that the actual expenses be reimbursable to the speaker and vice speaker until such time as the Executive Committee can further study the policy of reimbursement to the delegation for AMA meetings. This to be accomplished prior to the final referral to the Commission on Constitution and Bylaws and to the Indiana delegation. An updated fiscal note will be included in the ISMA policy manual.

Resolution 78-11, second opinions—referred to the Commission on Public Relations.

Resolution 78-12, membership recruitment and dues reduction—recommended that the Executive Committee consult with the Speaker of the House and report back to the Board after determining the fiscal impact of implementing the reduced dues. Regular billing to be processed as usual. Final referral to the ISMA Membership Department and to the Commission on Constitution and Bylaws.

Resolution 78-13, student loan program—referred to the Executive Committee to research other available loan programs. Referred to the Commission on Constitution and Bylaws for information only.

Resolution 78-14, continuous care in health care facilities—referred to the Commission on Medical Services for further study and recommendations to the 1979 House of Delegates.

Resolution 78-16, communicating information on organized medicine to students, interns and residents—referred to the Commission on Public Relations.

Resolution 78-17, comprehensive community mental health centers—substance of resolution to be transmitted immediately to the Joint Commission on Accreditation of Hospitals and to the Medical Licensing Board.

Resolution 78-18, Blue Shield Board nominations—referred to the Commission on Constitution and Bylaws for recommendations to the 1979 House of Delegates.

Resolution 78-20, cost containment—referred to the Committee on Voluntary Effort.

Resolution 78-21, health screening programs—referred to Commission on Medical Services.

Resolution 78-22, cooperation with PSRO—referred to the Commission on Medical Services and to the Ad Hoc Data Processing Steering Committee.

Resolution 78-23, nominations for Blue Shield Board—referred to the Commission on Constitution and Bylaws.

Resolution 78-24, Pennsylvania court action—referred to the Indiana delegation to the AMA.

Resolution 78-25, affirmation of present AMA code of ethics—referred to the Indiana delegation to the AMA.

Property

1. Attempted to buy the building at 3951 N. Meridian Street and failed.

2. Caused the house at 3942 Pennsylvania Street to be torn down.

3. Bought the Globe Building and monitored its ISMA use and lease of remaining space.

Process

Attention must be given to the process through which the Board of Trustees acts as well as to the actions taken and work accomplished.

The volume of this work has reached the point at which the board must consider day-and-a-half meetings. Alternative to this, the board might consider sub-committees of several trustees to prepare and prework agenda items. Additional to preparing agenda items, such committees could advise officers, staff, committees and commissions along lines of their expertise. They would serve all as reservoirs of experience and knowledge.

Under no circumstances should such committees duplicate the activities of regular committees and commissions—their only purpose would be to do board work.

Such committees should be able to keep the planning activities of the board at a high level. Neglecting this, the board may become prone to negative actions only, becoming an impediment rather than a resource to the ISMA, which in turn might lead to circumventions by the officers and/or staff. Such resultant elitism would be repugnant to the House and membership of the ISMA.

Three such committees of the board might be (and their function be): property, policy, personnel.

I made a tenative attempt to form such committees of the board this year; certainly not enough experience was gained to determine their value.

With this year's experience, however, I believe the responsibility of audit constitutionally and functionally belongs to the Executive Committee, not with the board committee.

I sincerely hope future board chairmen will utilize such committees.

Alvin J. Haley, M.D.
Chairman

Reports of Commissions

Medical Services

The Commission on Medical Services, in concert with the Subcommissions on Insurance and Aging, met on several occasions to handle a multitude of health related items.

The main area of concern of the Subcommission on Insurance during 1978-79 was the study to determine the feasibility of ISMA forming a life insurance company. After carefully analyzing all the facts available, and conducting an insurance survey of the ISMA membership, it was decided to submit a resolution to the ISMA House of Delegates requesting approval for forming a life insurance company. Such a company, the Commission feels, will provide better insurance benefits to the ISMA membership.

The Subcommission on Insurance also recommended two new insurance programs—In-hospital Protection Plan and Medicare Supplement Plan—to the Board of Trustees, which are now being offered to the membership through CNA. A group-sponsored dental plan, put together by the Blues, was sent to the Board of Trustees without a recommendation and was turned down.

A Uniform Claim Form, designed by ISMA staff, was approved by the Commission for submission to all interested parties. So far, the reaction from Medicaid and CHAMPUS has been negative. The Indiana Insurance Department is checking with the Health Insurance Association of America and the AMA to find out their comments before taking any action.

The Subcommission on Insurance, with the cooperation of the Blues, was also able to reduce the premium for both Plan A and B for the 1979-80 policy period, while increasing the benefits in Plan A.

The Commission once again took up the subject of "Cooperation With PSROs" as specified in Resolution 78-22 and determined that the Association should take a wait-and-see position to determine which of the two methods—not participating, participating—is the best course of action.

Resolution 78-14, "Continuous Care in Health Care Facilities," was also referred to this Commission. After careful consideration of ISMA in-house legal counsel opinion, the Commission decided it would not be in the best interest of medicine to seek legislation to control the licensing of such facilities.

The Commission concurred with the intent of Resolution 78-21, "Health Screening Programs," and requested the Board of Trustees to inform county societies to be aware of any screening programs offered in their area and be sure a physician is involved in the program. Any programs not meeting the criteria are to be brought to the ISMA's attention for help in alleviating the problem.

An in-house legal opinion on itemized billing was approved by the Commission for distribution to all ISMA members through the *ISMA Reports*. The information also urged all physicians to discuss cost of services with the patient before the procedure is done.

At the request of Governor Otis R. Bowen, M.D., the commission investigated the way Paid Plasma Centers operate. The Commission reported back to the Governor that sometimes the paid centers are the only available source of blood plasma, but they should be overseen by the appropriate body to be sure health standards are maintained.

Commission members discussed the problems that community mental health centers face regarding psychiatric help and supervision and decided there is a need for greater physician participation in this area. ISMA in-house legal counsel's opinion was that there is legislation already passed which governs mental health centers and supervision of psychiatric help and, therefore, only needs to be implemented. This information was communicated to each county society.

Other areas attended to were categories for office surgery, Medicare reimbursement, 30-day notification for a tubuligation or sterilization, Social Security Disability forms, Emergency Medical Services Communications Plan, Carter Health Plan and the Indiana Health Plan.

The Commission approved sending a letter written by the Subcommission on Aging to HEW and others concerning the Medicare and Medicaid programs.

I want to thank the members of the Commission, Subcommissions and staff for their invaluable assistance during this past year.

H. Marshall Trusler, M.D.
Chairman

Subcommission on Insurance
William Cast, M.D.
William Cutshall, M.D.
Eli Goodman, M.D.
Jack W. Pearson, M.D.
H. Marshall Trusler, M.D.

Legislation

The Commission on Legislation conducted three formal meetings concerning the 1979 General Assembly Session. The 101st General Assembly considered over 1,600 proposals, with over 100 bills receiving commission review. The Commission on Legislation agenda items reflected a variety of proposals which perennially confront organized medicine both in Congress and the Indiana General Assembly.

During the 1979 session, the Indiana General Assembly adopted amendments to the Medical Malpractice Act, H.B. 1656; Family Practice Funding, H.B. 1933; Medical Practice Act Amendments, H.B. 1852; and School Employees Giving of Medication Upon Physician's Orders, H.B. 1566, all of which were actually supported by the ISMA Commission on Legislation.

The Commission adopted a policy of opposition in accord with the ISMA Board of Trustees to the Nurse Practice Act Amendment, S.B. 489; Generic Substitution, S.B. 250; Certificate of Need, S.B. 324, and expanded Chiropractic Licensing, H.B. 1572. Each of these legislative propositions failed to be enacted into law in 1979. Additionally, a variety of legislative initiatives were discussed by the Commission with no position being adopted.

On the Congressional level, the Commission on Legislation communicated its position to our Indiana Congressional Delegation with regard to the various National Health Insurance Proposals, Hospital Cost Containment, Reauthorization of Health Planning Act and Medicare and Medicaid Reform S505, legislation currently pending before Congress. The ISMA Commission on Legislation was requested and helped to prepare a statement on the Federal Medical Records Privacy Act before a subcommittee of the Interstate and Foreign Commerce Committee in Indianapolis.

The Commission is continuing to monitor Interim Legislative Study Committees as well as various other legislative initiatives in the Congress.

The Chairman wishes to thank the members of the Commission on Legislation and the staff for their loyal and effective work during the 101st General Assembly and the 96th Congress.

Richard L. Reedy, M.D.
Chairman

Reports of Commissions

Constitution and Bylaws

The Commission on Constitution and Bylaws met March 21, 1979. There were no changes in the Constitution; however, the Commission recommends the following changes to the structure of the Bylaws.

For clarification, proposed changes are indicated as follows:

Bold face and parenetheses indicate proposed deletions;

Underlining indicates proposed changes;

Italics indicate proposed additions.

The Commission met in August; a supplemental report will be submitted.

As chairman, I wish to express my appreciation to all members of the Commission for their efforts.

Lester Hoyt, M.D.
Chairman

CHAPTER II—DUES, FUNDS AND ASSESSMENTS

Section 1—Dues

A. Income and Expenses

(b) *The Indiana State Medical Association dues for active members in their first year of practice following formal training, shall be one-half the amount as may be established by the House of Delegates. County medical societies shall be encouraged to follow the same policy.*

(c) Voluntary contributions.

(d) Revenues derived from the Association's publications.

(e) Upon recommendation of the Board of Trustees or any other manner approved by the House of Delegates.

CHAPTER VI—OFFICERS

Section 2—Removal, Death, Resignation, Vacancy

In the event of the death, resignation, removal, or disability of the President, the President-Elect shall succeed to the presidency *and serve until the completion of his own term as president to which he was elected.*

CHAPTER VI—OFFICERS

Section 3—Duties

C. Treasurer

The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Board *unless he is included in the coverage of a blanket or position bond.* He shall receive all bequests and donations to the Association and shall demand and receive all funds due the Association **(except accounts due THE JOURNAL)** in the conduct of its business. The funds of the Association shall be deposited in a depository or depositories designated by the Executive Committee, and withdrawals from such funds shall be made on checks or drafts signed by the Treasurer, *and/or other officers of the Association as the Executive Committee may designate.* He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands. **(and shall subject his accounts to an annual audit by a Certified Public Accountant.)**

CHAPTER VII—TRUSTEES

H. Financial Reports

(1) Have the accounts of the Association audited at least annually.

(2) **(Make proper financial reports concerning Association affairs to the House at its annual convention.)**

CHAPTER VII—TRUSTEES

O. Election of At-Large Members to Executive Committee.

The Board shall at its meeting following the close of the House of Delegates specify the duties and elect two members of the Association, at large, or of the Board, who, with the President, the President-elect, the most recent living past president, the Treasurer, *the Assistant Treasurer, with the power to vote in the absence of the Treasurer, ex officio the Speaker and Vice Speaker,* and the Chairman of the Board, shall constitute and be known as the Executive Committee. If such members of the Executive Committee be not members of the Board they shall not have the power to vote in the Board.

CHAPTER VIII—THE EXECUTIVE COMMITTEE

Section 1—Composition

The Executive Committee, *consisting of seven voting members,* constituted as provided in Chapter VII (O) of these Bylaws, shall hold its first meeting immediately following the meeting of the Board held at the close of the last meeting of the House of Delegates in the Annual Convention, and shall organize by electing its chairman.

CHAPTER IX—ORGANIZATION OF ACTIVITIES AND RESPONSIBILITIES

Section 9—Ex Officio Members

The President, President-elect, Executive Director, Speaker, Vice-Speaker of the House and the Chairman of the Board of Trustees shall be ex officio members of all the foregoing committees and commissions without voting rights. **(where their inclusion on the committee or commission is not otherwise provided for in these Bylaws.)**

CHAPTER XIV—TRUSTEE DISTRICT MEDICAL SOCIETIES

Section 9—Recommendation of Nominees to the Board of Directors of Mutual Medical Insurance, Inc.

Each district medical society may recommend nominees from its membership (a physician subscriber to Mutual Medical Insurance, Inc.) to serve on the Board of Directors of MMI. The physicians recommended will be submitted for nomination at the annual meeting of Mutual Medical Insurance, Inc. In addition ISMA Board of Trustees may recommend additional nominees.

Reports of Commissions

Public Relations

The Commission on Public Relations met in December 1978 and in January, March, June and August 1979.

At the recommendation of the Commission, and with the approval of the Board of Trustees, ISMA hired a full-time Director of Public Relations, Barbara Lauter, who joined the Association in May and is serving as staff representative to the Commission.

During the past year, the Commission has been involved with developing a viable speakers bureau program, dealing with resolutions that emanated from the 1978 House of Delegates meeting, selecting winners for the annual Journalism Awards and Physician Community Service Award programs, developing an orientation pamphlet for community newcomers, as well as several other minor matters. New programs also are being initiated.

After review of the established Hopkins Speakers Bureau—through which lay speakers represented medicine—ISMA decided to abandon the program. Physicians and members of the Auxiliary will be sought for participation in a new ISMA Speakers Bureau, to be initiated and guided by the PR Director in conjunction with a full-fledged statewide public relations network of spokespersons and media contacts. This network optimally will cover all areas of Indiana and speakers' seminars will be given by the PR Director to familiarize the spokespeople in dealing with the media as well as telling medicine's story effectively. Designated spokespeople will also receive regular packets of information to update them with the socioeconomic as well as political aspects of medicine. It is projected that the network will take approximately one year to establish.

Resolution 78-16 (Communicating Information on Organized Medicine to Students, Interns and Residents) was referred to the Commission for action. After much discussion and research, it was decided that the best approach to orienting freshman and sophomore medical students to the benefits of organized medicine would be to prepare Student Membership Information Packets for distribution to county medical societies in areas where regional campuses are located. Also being considered in certain areas are personal get-togethers of doctors and students where career counseling might be offered. This might help to encourage physicians to practice in medically underserviced areas as well as choose fields of medicine where shortages exist.

Developed during the year was a pamphlet titled "You and Your Doctor," which is being distributed throughout the state by Welcome Wagon representatives. The new PR Director will review and update existing ISMA publications for expanded distribution throughout the state, especially to county societies, whose requests for these pamphlets have been few to date.

A statewide bulk mailing of Health Tips/Health News has been initiated to print and broadcast media to establish name identification with the Association and provide public service to their readers and listeners. Monitoring of clippings and surveys of broadcast media are being done to justify effectiveness of the public service program.

ISMA Reports, the internal newsletter prepared monthly for ISMA members, is undergoing revision to increase readability through content and layout. Also to be revised and updated is the ISMA Membership brochure. All ideas, comments and criticisms are welcomed from members indicating what they would like to have included in the newsletter and should be sent to Barbara Lauter at the ISMA office.

The Commission discussed the possibility of utilizing WAT 21, the closed circuit medical television station of Indiana University School of Medicine, as a mechanism to reach ISMA members throughout the state. A proposal to WAT 21 is currently being drafted requesting approximately five minutes per two-week programming intervals to be used for news of interest to ISMA member-physicians such as license renewals, meeting reminders and happenings affecting the world of medicine. It is hoped that if the proposal is accepted, the segment also will become a subtle vehicle for ISMA membership promotion.

A more effective and comprehensive communications program, both internally and externally, will be the goals of the Commission on Public Relations during the coming year. There is much to be done.

Marvin E. Priddy, M.D.
Chairman

Medical Education

The Commission on Medical Education and the Subcommission on Accreditation has held one meeting thus far this year. A meeting was scheduled August 19, 1979, and a supplemental report will be filed.

The following recommendations were made to LCCME to accredit or to reaccredit:

Indiana Bone and Joint Club, Terre Haute Regional Hospital, Indiana Orthopeadic Society, LaPorte Hospital, Clark County Memorial Hospital, Indiana Psychiatric Society, St. Joseph Medical Society, St. Margaret's Hospital, Medical Education Foundation of Southwestern Indiana, Inc., Indiana Chapter of the American College of Surgeons.

Due to the infrequency of meetings held by LCCME, we have not yet been appraised of the status of these recommendations.

Steven C. Beering, M.D.
Chairman

Subcommission on Accreditation
Eugene M. Gillum, M.D., Chairman
Barbara Backer, M.D.
Howard Harris, M.D.
Donald Schlegel, M.D.
Jack Kane, M.D.
Gerald C. Walthall, M.D.
Raymond Pierce, Jr., M.D.
William Ragan, M.D.
Jeffrey Kellums, M.D.
Charles Helmen, M.D.
Garry Bolinger, M.D.
Ralph Wilmore, M.D.
Larry Hitchcock, M.D.
John Osborne, M.D.
Glenn Bingle, M.D.
Jack W. Pearson, M.D.
Robert Longshore, M.D.
Jeffrey Harker, medical student

Reports of Committees

Impaired Physician Peer Review

Since October 1978, the Impaired Physician Peer Review Committee has met six times and at press time had three more meetings scheduled prior to the 1979 ISMA annual convention.

During 1978-79, the Committee has handled an increasing number of inquiries about assistance for impaired physicians, and several of these cases have been successfully referred for evaluation and treatment. The increase in referrals, the Committee feels, is attributable to the circulation of the Impaired Physician pamphlet, and the fact that members of the Committee have been attending county society, district and auxiliary meetings to explain the program.

The Impaired Physician Advisory Committee now has a representative from each medical district who has been attending quarterly meetings. Doctor Larry Musselman was named a member of the permanent committee bringing the number of members to five as stated in the Constitution and Bylaws of the ISMA. The ISMA Auxiliary has appointed two of its members as liaison to the Committee.

Several items of importance were discussed by the Committee, which resulted in the following actions:

1. An article on the "Dangers of Self-Prescription" was written by Gerald P. Johnston, M.D., chairman of the Committee, for inclusion in the August 1979, issue of THE JOURNAL [pp.570-572.]

2. A resolution on Prescribing of Controlled Drugs For Oneself Or One's Family will be presented to the 1979 House of Delegates for consideration.

3. A survey of other states is being conducted to see what, if anything, is being done about the aging, senile physician concerning retirement or limiting his practice.

4. The Committee supports the development of a Caduceus Club in Indiana and, with Board of Trustee approval, will work with such a group if formed.

5. Grievance and complaints about physicians will be checked to see if an impaired physician is involved. If not, the problem may be one of ethics and should be referred to the county society for its appropriate action.

A general scientific program has been approved by the Convention Arrangements Commission for Tuesday, Oct. 16. The program will consist of a talk on "Physicians Helping Physicians," a panel of recovered physicians sharing experiences in recovery, followed by an open AA meeting.

The Committee has received a number of requests from other state associations and individuals for a copy of the ISMA Impaired Physician pamphlet. The first revision and reprinting of the Impaired Physician pamphlet was completed and will be available at the Impaired Physician Committee booth at the annual convention.

Two items the Committee is looking into are "Talwin and other abused drugs" and "poor prescribing habits of physicians." The Committee feels that these are two potential problem areas that need to be watched.

Members of the Impaired Physician Peer Review Committee are available to speak at county society and district meetings.

I want to thank the members of the Committee, and those of the Advisory Committee, for devoting their time and effort to this program.

Gerald P. Johnston, M.D.
Chairman

Advisory Committee
Larry Sims, M.D.
Daniel J. Combs, M.D.
Cesar Archangel, M.D.
Forrest Daugherty, M.D.
John Ellett, M.D.
Alfred Hollenberg, M.D.
Thomas M. Brown, M.D.
Harry Holwerda, M.D.
Herbert P. Trier, M.D.
Robert Nelson, M.D.
Howard M. Luginbill, M.D.

Medical Education Fund

The Committee has met only once thus far this year, but has been successful in exercising its responsibility for management of the Fund. The Committee met Jan. 24, 1979 with Mr. John Smith, vice president and trust officer, American Fletcher National Bank, to discuss performance of the Fund's portfolio during 1978.

The overall value of the portfolio declined during 1978, as did most other bond funds due to a general depression in the bond market attributable to high interest rates. The total return for the year was 4.73%, but if the Committee had not transferred the Fund's assets during 1977 to Corporate Bond Fund D (fixed income), the total return for 1978 would have been approximately 1.9%. The cash equivalent position of the Fund was increased to 40% during 1978, which aided the Fund's performance. These cash equivalent securities were invested mostly during the last quarter of 1978 in commercial paper and certificates of deposit to take advantage of the prevailing high interest rates. The Committee requested that it receive regular quarterly reports so it can properly monitor the Fund's performance.

In March 1979 all Indiana auxiliary county presidents and county AMA-ERF chairmen were notified that Dr. Steven Beering, dean, Indiana University School of Medicine, had consented to allowing Auxilians to designate their AMA-ERF contributions to Indiana University and to any of its regional medical school campuses. Hopefully, this will have a positive impact on the various AMA-ERF fund-raising activities of the Auxiliary throughout the state and thereby benefit the Indiana Medical Education Fund.

In response to a request from Doctor Beering for a disbursement from the Fund of $110,000 to support the educational efforts of the Department of Medical Genetics, the Committee approved a partial distribution of $80,000, which was presented to Doctor Beering in May 1979 with the Auxiliary's participation. This was done on the advice of AFNB's trust office responsible for the Fund and with Doctor Beering's concurrence, based on the fact that a distribution of this amount would not jeopardize the stability of the Fund. The balance of Doctor Beering's original request ($30,000) was conveyed to him in July 1979.

Also in 1979 a total of $1,336,383 was channeled by AMA-ERF to medical school deans in the form of unrestricted, direct grants. Indiana University School of Medicine was the recipient of the second largest grant made, $41,427, while the University of Tennessee received the largest, $52,843, and Northwestern was third, receiving $35,537.

The present status of the Fund is as follows:

Fund balance as of 10/1/78:	$414,208.80
Received from AMA-ERF 3/27/79	41,427.60
Interest income	30,260.67
Disbursements to I.U. School of Medicine	(110,000.00)
Trustees fee	(1,340.23)
Fund balance at 7/17/79	$374,556.84

Donald E. Wood, M.D.
Chairman

Reports of Committees

Medico-Legal Review

The Medico-Legal Review Committee had a minimum of internal inquiries submitted to it, which were handled by the chairman with no inquiries requiring committee action.

During the year, the committee chairman has attempted to determine the status of the inter-professional code within the Indiana State Bar Association and has been advised that while the ISMA approved the code Oct. 9, 1957, and approved a revision Oct. 14, 1971, the Indiana State Bar Association has apparently never approved either document as of this date.

ISMA has been advised that a committee of one has been appointed by the ISBA Medical-Legal Matters Conference to study the code and report back to it, at which time the ISBA Medical-Legal Matters Conference intends to submit its draft to the ISMA Medico-Legal Review Committee for comments.

We are hopeful that we will have an inter-professional code satisfactory to both professions in the immediate future and our committee will continue to assist the Association in any way possible.

John W. Beeler, M.D.
Chairman

Grievance

The Grievance Committee met in 1978-79, reviewed 10 old cases, nine of which were concluded, one referred to the trustee of his district for further follow-up. Six new cases were received and reviewed; action was taken as necessary and the cases were closed. Two others who explained their cases were discussed, no action taken on one case and one case was continued to our next meeting.

The Grievance Committee wishes to thank members for their attendance, particularly Dr. George T. Lukemeyer, and for the help in the past year.

G. Beach Gattman, M.D.
Chairman

Future Planning

The Future Planning Committee addressed itself to several issues during the year.

The Committee reviewed the four objectives outlined in Dr. Harshman's address to the House of Delegates with the plan to routinely review the following objectives:

1. **ISMA reserve funds must be adequate.** The Committee was informed that the Association now has 18 months' operational expense in reserve.

2. **All programs should be re-evaluated periodically.** This ongoing task is primarily performed by ISMA executive staff.

3. **ISMA must improve its communications to members as well as to the public.** A new Director of Public Relations has been employed by ISMA to carry out this function.

4. **ISMA must continue to develop skills in negotiations.** The ISMA Committee on Negotiations is continuing to pursue this objective.

The Committee believes that a set of guidelines for supervising physician extenders must be established. It is believed that a committee appointed by the Board of Trustees should begin to function. The following points should be considered in setting up the guidelines:

1. No physician extenders should be on the committee.

2. The physician extender shall not practice independently of physician supervision and direction.

3. The scope of supervision for a physician extender shall be the responsibility of the physician.

4. The importance of quality health care, cost and continuity of health care for the patient must be stressed.

5. The ethical, moral and professional concern of the physician for the patient should be emphasized.

* * *

The Committee reviewed Resolution 78-6 (ISMA Spokesperson) and recommends that the resolution not be implemented. It is believed that two-day workshops educating ISMA officers would better facilitate this endeavor.

With the employment of the new PR director, staff should be prepared to keep the physician aware of ISMA policy and assist in whatever way needed, on a continuing basis, in order that ISMA officers can serve as ISMA spokespersons. After the first-year workshop for ISMA officers, the second-year workshop would encompass delegates and alternate delegates, and the third-year county and district officers.

* * *

Concerning Resolution 78-16 (Communicating Information on Organized Medicine to Students, Interns and Residents), the Committee recommends that the workshop-retreat concept of past years be resumed to meet the objective of informing students, interns and residents.

Peter R. Petrich, M.D.
Chairman

Reports of Ad Hoc Committees

Data Processing Steering

During the past year, the Ad Hoc Data Processing Steering Committee has continued to direct and monitor activities of the ISMA internal computer system. During this period, ISMA computerized records have been expanded to include all licensed M.D.s in Indiana rather than just ISMA members.

Our committee has spent considerable time discussing the specific data items to be stored in the ISMA computer. The concepts explored include the individual physician's right to privacy, ISMA's need for information, and the ISMA financial involvement necessary to collect, store and update data. We believe the resultant system protects the privacy of the individual physician while providing ISMA with only those specific items of information that are necessary for the successful operation of the Association.

Programming has been an additional key consideration in the design of the ISMA computerized data system. Because of the expense of programming, we have been particularly cognizant of the need to limit programming activities to those areas that are absolutely necessary.

An area of particular concern to this committee has been the creation of data release guidelines. We have found that the ISMA headquarters office receives numerous requests for data on our physician population. Requests for mailing lists are particularly numerous. We have now created a document entitled "ISMA Confidentiality and Data Release Guidelines" that permits staff to release business addresses, business telephone numbers, and specialty information in particular circumstances. Requests from commercial solicitors and requests for summary statistical information are all referred to the ISMA Executive Committee for a decision. In no case, will home telephone, home address or spouse's name be released to any outside agency or organization.

Our research indicates there are infinite variations of computer hardware available. We have explored a number of these configurations and have determined that the IBM System 32 does the best job of fitting our needs at a reasonable cost.

The 1979 membership billing was done on the ISMA internal computer. As the result of the efficient manner the bills were produced and processed upon return to the ISMA office, we found total cost for billing was reduced while at the same time our total income was increased.

During the past year, the Ad Hoc Data Processing Steering Committee has attempted to keep both the ISMA Executive Committee and the ISMA Board of Trustees aware of the decisions we have made. We have also solicited comments from county medical societies regarding the data to be stored in the ISMA computer and the ways in which that data would be used.

James H. Gosman, M.D.
Chairman

Immunizations

The Ad Hoc Committee on Immunizations met twice during 1978-79. In addition, the chairman kept members informed of his participation on the Immunization Action Committee for the state of Indiana, which has become a 365-day project staffed by HEW employees on loan to the Indiana State Board of Health. They are responsible for the news media stories of impending disease epidemics, immunization audits of various age groups, epidemiological investigation of measle cases, and interpretation of data that best support former Secretary Califano's criticism of private medicine.

It was the consensus of the ISMA Ad Hoc Committee on Immunizations that the absence of disease during the past 10 years combined with the 90 to 95% immunization levels for first time school enterers since 1976 dictates that: 1) we have no major problem; 2) our method of private practice is of good quality throughout the state; and 3) that the immunization deficiencies quoted by former Secretary Califano do not apply to our state, probably not to the nation, and have been presented in a dishonest fashion. This information was reported to the State Immunization Action Committee and to the ISMA Auxiliary, which was requested by Governor Otis R. Bowen, M.D., to be the primary voluntary organization to handle the high school immunization audit.

Because paralytic poliomyelitis has become a disease of young adults, replacing its role in pediatrics, a guidelines up-date was prepared and distributed to all primary care physicians. Also a Dear Parent letter audit form was composed for use by the Auxiliary in doing the statewide immunization audit. In addition, an Immunization Reaction Bill was written for the last Indiana legislative session, modeled after the California law, that established compensation limits for adverse reactions and frees all physicians from liability. No action was taken on the bill and it will be submitted again next year.

Robert L. Parr, M.D.
Chairman

Miscellaneous Reports

The Journal

Trial balance of the budget at the end of the third quarter shows an income figure of 79.7%. This is above the 75% which would be expected and is due to the fact that most of the income from senior member subscriptions and sale of rosters is recorded early in the year. National advertising revenue is below expectations but local advertising sales have balanced the shortfall.

Expenses for the three quarters are above predictions. The total expense figure is 79.7%, due mostly to increase in the printing bill. The roster, the most expensive item, returns a good portion of its expense through public sales. Expenditures other than printing have averaged out at 75%.

Space limitation on scientific articles has resulted in more concise and more readable presentations. It also has made it possible to publish more articles. The backlog of scientific material has been reduced to a six-month interval between acceptance and publication.

The series of CME papers continues with increasing participation in the examinations and registrations for Category 1 credit. The CME series has been written and subsidized by Indiana University School of Medicine through its Continuing Medical Education Department. Authorship gradually will be expanded to include medical faculty members and others throughout the state. Subsidy has been enlarged this year to take advantage of the Sandoz Prize Award and the Mary Rogers Fund of the Indiana Medical Foundation.

THE JOURNAL was awarded a Special Award in the Sandoz Medical Journalism Contest this year. The award is in recognition for design and arrangement. A plaque and a monetary prize of $250 will be presented by Sandoz Pharmaceuticals during the annual convention. The award will be used to subsidize a CME article, as was the $500 award received previously.

Frank B. Ramsey, M.D.
Editor

Indiana Medical Education and Developmental Information Center (I-MEDIC) Board of Directors

The Indiana Medical Education and Development Information Center was originated in October 1973 by ISMA House of Delegates Resolution 73-21. I-MEDIC was incorporated as a not-for-profit corporation in March 1975 and organized as a for-profit corporation in May 1978. I-MEDIC is totally owned by ISMA.

The organization currently functions as a computer service bureau, handling the data processing needs of five of the seven Indiana PSROs. Contracts with PSRO Areas II, III, IV, V and VII were finalized between November 1978 and May 1979.

In deciding to create I-MEDIC as a computer service bureau, the Board of the Indiana State Medical Association recognized the need for privacy of computerized physician and patient data. The consensus of the ISMA Board was that privacy could best be assured by maintaining some degree of control over that data. In at least one PSRO Area, I-MEDIC maintains the only listing in existence that links physicians with their computer numbers. Even the PSRO is unable to determine a physician's identity by his computer code number.

I-MEDIC currently maintains an in-house computer with plans for remote terminals in South Bend, Terre Haute, Fort Wayne and Evansville. Programming for the five PSROs under contract with I-MEDIC is currently nearing completion. I-MEDIC employs a full-time data manager as well as two full-time data entry clerks.

Future directions for I-MEDIC will be determined by its Board of Directors. The Board is composed of one ISMA member for each of the PSRO's districts, plus the ISMA president, president-elect, treasurer and chairman of the ISMA Board.

Eli Goodman, M.D.
President, I-MEDIC

Martin J. O'Neill, M.D.
Joseph F. Ferrara, M.D.
Douglas H. White, Jr., M.D.
Alvin J. Haley, M.D.
Donald Chamberlain, M.D.
Joseph Dukes, M.D.
Charles Hachmeister, M.D.
Donald Taylor, M.D.
Donald F. Foy

Improvement of Medical and Health Care in Jails

In conjunction with the American Medical Association, the ISMA is continuing its efforts to see that prisoners in county jails throughout the state are provided with at least minimally adequate medical care. ISMA recently completed its third year as a participant in this national pilot project.

Even with budgetary and staffing restraints, ISMA has accomplished the accreditation of nine Indiana jails. Only 35 jails have been accredited throughout the nation.

Generally speaking, we have found the Indiana correctional community to be receptive to the AMA standards. Working with their budgetary limitations, several Indiana jails are attempting to bring their medical systems into compliance with the AMA Standards.

Both the Indiana Sheriffs Association and the Indiana Lawyers Commission have been extremely supportive of the project.

The grant that funds this project was renewed June 1, 1979. The 1979/1980 grant provides for a level of funding that has made possible the employment of a full-time project director, part-time executive help, and a part-time secretary.

Present indications indicate that Indiana will continue to lead the nation in our impact on inmate health needs. We encourage all Indiana physicians to support this project. The program can only be workable if it has the direct and indirect support of the medical community.

Dwight W. Schuster, M.D.
Chairman

Reports of Trustees

First District

For the second year, the First District Society provided a caucus room at the State Convention for use of its delegation. Attendance at meetings of the House was improved over that of previous years, and I believe the availability of an appropriate meeting room contributed to this. None of the resolutions from this district was defeated, although one was referred to the Commission for Medical Services for further study. The delegation worked successfully for re-election of Dr. Gilbert Wilhelmus as alternate AMA delegate. I want to thank Dr. Ray Stewart for his conscientious and able service as delegation chairman.

The annual District meeting held in May at the Evansville Country Club was, as always, an outstanding event, with 164 doctors and spouses attending. Winners in the 4th Annual Bob Acre Memorial Golf Tournament held the day of the meeting were Low Net, Dr. John Berry (who broke a four-way tie on the third hole of the playoff), and Low Gross, Dr. Dennis Hodge. The Society was indebted to Mead Johnson and Company for their generous sponsorship of the cocktail hour. There were many representatives from ISMA present, including President Arvine Popplewell, M.D., House Speaker Lloyd Hill, M.D., Commission on Medical Services Chairman, H. Marshall Trusler, M.D., Executive Director Don Foy, and staff members Bob Sullivan and Howard Grindstaff. Also present were Gary Miller with Indiana Blue Shield, David Raider with the Ohio State Medical Association, and Tom Miller and Bill Maddox of Mead Johnson and Company. Everyone enjoyed the dynamic program on "Motivation" presented by Indiana University football coach, Lee Corso.

The business meeting included a report by Dr. Trusler on the possibility of an ISMA-owned life insurance company, and Mr. Raider of the Ohio Association provided very interesting information on OSMA's experience in a similar venture. Dr. Larry Sims reported for the Committee on the Impaired Physician, and Dr. Albert Ritz for the very active Commission on Public Relations. Dr. Gilbert Wilhelmus reported on Indiana Blue Shield.

Officers for the coming year will be Dr. Frank Hilton, president; Dr. William Wells, vice-president; and Dr. John Pulcini, secretary-treasurer. Dr. DeVerre Gourieux was re-elected alternate ISMA trustee.

For his devoted service in a demanding position, I wish to thank Dr. Ralph Carlson who had decided not to seek another term on the Indiana Blue Shield Board of Directors when his current term expires next year. Thanks are also due Dr. Forrest Radcliff who served as District president throughout the past year, and to Dr. Gourieux for his faithful service as my alternate to the ISMA Board of Trustees.

John A. Bizal, M.D.
Trustee

Second District

No report filed

Third District

Three major issues appear foremost in formulating my report for the 1979 House of Delegates.

On May 6, the Board of Trustees directed the Subcommission on Insurance to proceed with a formal survey of ISMA members to determine feasibility of forming a for-profit insurance company originally authorized by ISMA Resolution 73-22. By the time of the annual convention the survey will have revealed member interest in accomplishing this formation.

Such a company will provide a vehicle to increase ISMA membership benefits by making available a variety of important insurance coverages. In addition, the company would create a financial and mechanical base upon which to develop a market for medical professional liability insurance, should the need arise, and the need according to insurance industry experts is very real and could materialize as early as the mid-1980s.

On the other hand, physicians are bombarded on all sides from APPA, AMA, AAPS, AAFP and others with insurance programs, and this brings up the question of what we want ISMA to do—should we spend our energies elsewhere?

The second issue involves the I-MEDIC program. I-MEDIC, the Indiana Medical Education and Developmental Information Center, has signed data processing contracts with five Indiana PSRO areas.

The corporation is presently collecting discharge data for these PSROs with the exception of Area VII, which has just received (June 1979) HEW approval for the PSRO to contract with I-MEDIC for computer services, and Area IV. At the time of this report I-MEDIC had collected data on approximately 48,000 abstracts.

This program, authorized by the House of Delegates last October, necessitated a loan by ISMA to I-MEDIC of $25,000 at an interest rate of 10%. It also brought to a head the lack of space and necessitated the purchase of a new building, which cost $150,000.

The third major issue involved the HEW contract with the Calumet Area Professional Standards Review Organization (CAPRO) not being renewed.

Established by a majority of physicians practicing in PSRO Region I, HEW informed the Calumet Area group that the decision was made specifically because:

1. CAPRO did not follow proper procedure in finding all of the hospitals in its area qualified to be delegated review functionaries.
2. CAPRO did not monitor the performance of delegated hospitals.
3. CAPRO did not satisfactorily adopt norms, standards, and criteria for use in the review process.

HEW notified CAPRO that to destroy their records would be a felony and they must be turned over to the new PSRO.

These were some of the interesting developments during the year which I see as impacting upon our individual lives and practices both currently and in the near and far future.

Thomas A. Neathamer, M.D.
Trustee

Fourth District

The Fourth District Medical Society annual meeting was held May 9, 1979 at Harrison Lake Country Club in Columbus with the Bartholomew-Brown County Medical Society as the host. The latter did a superior job and the meeting was an outstanding success. For that we thank Drs. Brockton Weisenberger and William Cooper and their wives. The ladies program was unique and very successful. Golf and tennis were enjoyed in the morning. An informative educational program was presented in the afternoon by Drs. Larry Einhorn and Peter Van Handel. Dr. Dean Berkley, Ph.D., Indiana University professor at the School of Business, was the evening speaker and was most entertaining.

At the business meeting, Dr. Mark Bever was reelected alternate trustee for the Fourth Medical District. Dr. Bever was elected president for the 1980 annual meeting and Dr. Harry Baxter of Seymour was elected secretary-treasurer. Dr. Manuel Garcia of Batesville was elected vice president. Our annual meeting for 1980 will be held in Seymour with the 1981 meeting in Batesville.

The Fourth District wishes to thank the officers of the Indiana State Medical Association who attended and also the ISMA staff, who did an excellent job with their attendance and assistance.

Howard C. Jackson, M.D.
Trustee

Reports of Trustees

Fifth District

Since assuming office as 5th District trustee last October, I have found these first months, as I have become involved, busy but exciting ones. I have regularly attended the Board of Trustees meetings and served on the ISMA Ad Hoc Policy Committee. I have learned to respect and admire the quality of our ISMA leaders, representatives and staff persons. We are indeed most fortunate.

In addition to the above activities, I have served as one of five M.D.s on the 31-member Statewide Health Coordinating Council (SHCC), serving on the Budget and Review Committee and helping to develop Indiana's State Health Plan from the three HSAs. I also serve on the Subarea I Council of the Southern Indiana HSA. As president-elect of the Indiana Academy of Family Physicians, I have represented Indiana at the Michigan Academy annual state meeting and at the 10 state regional conferences. In July 1979 I was reappointed by Governor Bowen to a second four-year term on the Indiana State University Board of Trustees after being nominated for the position by the I.S.U. Alumni Association.

Within the Fifth District, we have achieved real progress in medical care. The new hospitals in Greencastle and Clinton are now operating beautifully, Union Hospital in Terre Haute has completed its Phase III, and Terre Haute Regional Hospital is opening its totally new hospital in September 1979. ISMA membership in the Fifth District remains strong, as do the contributions to IMPAC. No HMOs operate within the district.

The Fifth District annual meeting was held May 30, 1979, at the Terre Haute Country Club. Approximately 90 persons attended, hearing an excellent address by the immediate past president of the American Medical Association. Officers elected were: alternate trustee—Dr. J. B. Ko, to succeed Dr. William Bannon, who has so successfully completed two terms; president—Dr. Rahim Farid, Brazil; secretary-treasurer—Dr. Clyde W. Jett.

ISMA official family members attending the meeting included Doctors Goodman, Hill, Trusler, Johnston and ISMA staff—Mr. Donald F. Foy and Howard Grindstaff.

The next annual meeting is scheduled for Brazil, Indiana, May 28, 1980.

Paul Siebenmorgen, M.D.
Trustee

Sixth District

Other than the annual meeting, the year has passed without major activity of district scope.

Our annual meeting was held in Rushville May 2, at the Rushville Elks Club. All county medical societies were represented. Dr. Hal Rhynearson, president, presided. Dr. Douglas Morrell, secretary-treasurer, arranged the program.

An excellent scientific program was presented by Dr. William Nasser and Dr. John Isch on the medical and surgical treatment of heart disease.

On behalf of the ISMA Executive Committee, Dr. Arvine Popplewell, president, and Dr. Al Haley, chairman of the Board of Trustees, reviewed current medical-political considerations. Dr. Lloyd Hill, House of Delegates speaker; Dr. Malcolm Scamahorn, AMA delegate; and Don Foy, ISMA staff, also contributed. Dr. David Crane's evening program on "Politics and Medicine" was great.

The District organization will continue with Dr. James Lorber, president; Dr. Douglas Morrell, vice-president; and Dr. William Kerrigan, secretary-treasurer. Dr. Davis Ellis was elected trustee representing the Sixth District. The 1980 annual meeting will be held in Connersville.

Davis W. Ellis, M.D.
Trustee

Seventh District

The Seventh District Medical Society's 1979 meeting honored Dr. Goethe Link on his 100th birthday. The meeting was attended by more than a hundred members and their spouses at the Foxcliff Country Club north of Martinsville in Morgan County.

The District's business meeting was conducted by Dr. Stephen Lee Hardin of Martinsville, Seventh District president. In addition to the routine business of acceptance of Minutes and Treasurer's Report, we were honored to have several representatives of the Indiana State Medical Association in attendance at our business session. State officers who were introduced and made comments on the current status of the State Association and the problems facing medicine in the State were Dr. Arvine G. Popplewell, Seventh District member and president of the ISMA; Dr. Alvin J. Haley, chairman of the Board of Trustees; and Dr. Lloyd Hill, speaker of the ISMA House of Delegates. Dr. Hardin also introduced Dr. Joseph Ferrara, treasurer of the ISMA; Dr. Douglas H. White, Jr., assistant treasurer of the ISMA; Dr. Peter R. Petrich, chairman of the ISMA delegation to the American Medical Association; and Mr. Don Foy, executive director of the Indiana State Medical Association.

Several elections were held including the selection of Dr. I. E. Michael as president-elect of the Seventh District. Dr. Michael will succeed next year's president, Dr. M. Max Wesemann. Dr. Malcolm O. Scamahorn was reelected to serve as Seventh District secretary/treasurer.

For the first time in several years, the District Society was able to conduct elections for complete terms for the two Seventh District alternate trustees. Dr. John D. MacDougall, who is currently president of the Marion County Medical Society, was elected to succeed Dr. I. E. Michael as the first alternate trustee from the District. Dr. H. Marshall Trusler was then selected to succeed Dr. Gerald J. Kurlander as the second alternate trustee.

Following the elections, a special report was made to the business session by Dr. Gerald P. Johnston, chairman of the ISMA Committee on the Impaired Physician. Dr. Johnston sought the assistance of the District in the activities of the Committee and provided additional information on how the Committee will be proceeding with its work.

Dr. Trusler, chairman of the ISMA Commission on Medical Services, was present to explain a proposal to develop a for-profit insurance company whose sole purpose will be the marketing of life and casualty insurance and whose stock sales will be open only to Indiana physicians.

Recognizing the problems which have beset the Central Indiana Health Systems Agency, the members in attendance voted to instruct the ISMA staff to develop a method for determining the fiscal responsibility of the Health Systems Agencies and specifically requested that the information gathered be disseminated to county and district societies throughout the state by the ISMA.

Regrettably, Dr. Goethe Link and Mrs. Link were unable to attend the Seventh District Meeting due to Dr. Link's hospitalization the night before. Although Dr. Link was not with us in person, the members enjoyed viewing the film "Because I Was Too Young" produced by Indiana University. Mementos of the evening included a certificate naming Dr. Link a Sagamore of the Wabash, birthday notes from the President of the United States, both Indiana Senators, and the Sixth District Congressman. The mementos were delivered to Dr. Link at his bedside the following day. Members

attending also signed a memory book comprising a hardbound set of Marion County Medical Society *Bulletins* which featured reprints of the articles about Dr. Link's many endeavors.

Donald C. McCallum, M.D.
John G. Pantzer, M.D.
Trustees

Eighth District

The Eighth District annual meeting was held at the Portland County Club July 13, 1979, and was very well attended. The golf outing was enjoyed by several of the guests. It was followed by a business meeting in the afternoon, at which Dr. Richard Reedy, Yorktown, was elected alternate trustee; Dr. John Jones, Anderson, was elected president; Dr. William Van Ness, II, secretary-treasurer of the 8th District. At the evening meeting, more than 65 people attended and enjoyed very much a presentation by Dr. David Crane. The 1980 meeting is set for June in Anderson.

Jack M. Walker, M.D.
Trustee

Ninth District

The "medical-political year" of 1978-79 has been similar to recent years from the standpoint of Association activity which relates to members of the Ninth District.

As trustees, we are striving to monitor and participate in discussions about federal intervention into private medical care to the extent that we might help perserve, for patients and doctors, the best health care system in the world. As a trustee I have participated in the legislative visit to Washington, D.C. and have written letters to politicians and health care bureaucrats, as well as attempting to contribute to decisions of the Board of Trustees dealing with the relationship of medicine to "The Feds." In every instance, our objective has been to decrease government meddling with people's health.

Other Board of Trustees' activity (as well as legislative committee activity) has been directed toward positive input into Indiana state legislative areas in order to help protect the health of the people and medical practice in this state. We have attempted to have appropriate input into such items as scope of chiropractic activities, attempts at generic substitution of drugs by non-M.D.s, and activities of the various "physician extenders," among many other topics.

There has also been considerable discussion by the Board of Trustees about services to individual ISMA members. Certainly the acquisition of additional space at the state headquarters and the hiring of a public relations director will be of benefit to members. The formation of an insurance company by the ISMA for the benefit of each individual member should be a positive step, and this matter will be presented for your approval at the House of Delegates' meeting in October 1979.

My foremost personal objective has been to represent the interests of the members of the Ninth District in the Board of Trustees' meeting. We must assure that our function as trustees is to accept ideas from and to formulate policy dictated by the ISMA members rather than attempt to dictate policy to you from the Board.

To be effective as trustees, we must continually receive input from individual ISMA members. Please continue to re-examine your personal priorities to determine if you can serve on ISMA standing committees or commissions or serve on a reference committee. I urge each of you to forward your ideas and concerns to me so that I may give statewide forum to the input from Ninth District members. Our private practice of medicine and the individual's right to choose his health care provider cannot be continued without vigorous input from individual members helping to make decisions of our committees, commissions and Board of Trustees more valid.

This year an interim Ninth District planning meeting was held, and this was attended by several county society presidents and secretaries, as well as delegates to the ISMA annual meeting. The consensus at the planning meeting dictated that a politically oriented speaker be obtained for the annual Ninth District meeting. Representative Dan Quayle of Huntington, an announced Republican senatorial candidate, spoke at that meeting, following an afternoon of golf, the usual business meeting, and then an enjoyable dinner. One of Representative Quayle's topics was funding of a government-sponsored, catastropic, medical expense payment plan by the tax credit method. Such proposals will require much attention from all of us interested in medical care in the coming months.

I relish the opportunity to represent the Ninth Medical District as its trustee. Please keep me informed of your opinions in order that I may do the best possible job in this position.

John A. Knote, M.D.
Trustee

Tenth District

The annual meeting of the Tenth District Medical Society was held June 6, 1979, at Lake of the Four Seasons Country Club, Merrillville, Ind. Dr. Lee Trachtenberg, president, presided and introduced guests including Dr. Arvine Popplewell, president of ISMA, Dr. Alvin Haley, chairman of the Board of Trustees, Dr. Lloyd Hill, speaker of the House of Delegates, Donald Foy, executive director of ISMA, Dr. Leonard Neal, alternate trustee, Tenth District, Bob Sullivan, ISMA director of Medical Services & Insurance, and Howard Grindstaff, ISMA Field Services coordinator. Each spoke briefly on various subjects of interest to the members present.

Mr. Sullivan introduced Dr. Gerald Johnston, who discussed the Impaired Physician Review Committee, on which he serves as chairman. He urged county societies to adopt similar activity at the local level.

Dr. William Fitzpatrick, member of the Board of Directors of Indiana Blue Shield, spoke on the activities of the Board and answered pertinent questions. Gary Miller, Blue Shield representative, was introduced and spoke.

Dr. Martin O'Neill reviewed some of the previously discussed items and encouraged members to become more active in the legislative arena in order to protect themselves from more restrictive rules and regulations emanating from Washington.

Elections were held for three district offices and the incumbents were re-elected; Dr. Lee Trachtenberg, president, Dr. Barron Palmer, secretary, and Dr. Leonard Neal, alternate trustee.

Winners of the golf tournament were Dr. Surjit Patheja of Valparaiso, low gross, and Howard Grindstaff, low net. They were both presented with trophies at the dinner.

During the afternoon, Dr. Susan Yang Kiang, professor of art at St. Mary's College, Notre Dame, presented an outstanding program exhibiting and demonstrating Oriental painting. She graciously gave the Society some of her paintings pertaining to medicine.

At 4:30 p.m. the wives of the physicians present held a meeting to discuss social events, including the district meeting.

At the dinner, additional guests were introduced. These guests included Dr. Peter Petrich, AMA delegate and past president of ISMA, Dr. Thomas Gehring, president, Lake County Medical Society, and Dr. Charles Griffin, president, Porter County Medical Society.

A television set donated by Don Laser Pharmaceutical Co. was won, as a door prize, by Mrs. Salman Gailani.

Following dinner, Dr. Trachtenberg introduced Timothy Hays, "The Mayor of Whoopup, Missouri," who gave a very entertaining talk.

The Tenth Medical District is composed of Lake and Porter Counties in the extreme northwest section of Indiana. Although it is heavily industrialized, it has an agricultural base; however, because of the amount of industry, the physicians of the area are concerned about the HMO programs that are developing in various areas of the country, some federally subsidized. Interest in this form of health care delivery by the labor unions, industries, and insurance companies is growing. Since we feel the threat of facing a large HMO in our area that does not have the support of our physicians but does have the support of unions, companies, and insurors, we applied (through the Calumet Area Foundation for Medical Care) for a federal grant for a feasibility study to be done by the physicians. This application was rejected because our area was stated to be incompetent in the performance of PSRO and therefore would be incompetent to do a feasibility study because some of the same people would be involved. The defunding of CAPRO and the rejection of our application demonstrated to us the dangerous power of federal bureaucracies and the ruthless manner of using this power. At present, we are breathing a little easier with the burden of PSRO off our backs but we do not know when the next blow is going to fall. A lot of time and work by the physicians of Lake, Porter and LaPorte Counties went for naught when CAPRO was defunded. Needless to say, the physicians in Area 1 are no longer in the mood to cooperate with any federal programs because of the inherent danger of participating in a game in which your opponent can write and interpret the rules of play.

Martin J. O'Neill, M.D.
Trustee

Twelfth District

The Twelfth District of ISMA will hold its annual meeting Sept. 20, 1979, at the Imperial House Motel in Fort Wayne, Ind. Starting at 5 p.m., the business meeting will elect a trustee and select a nominee for Blue Shield. Such important business necessitates good attendance.

Additionally, officers and staff will report actions and activities from the past year.

Purchasing the Globe Building a few doors from the ISMA building in Indianapolis, the trustees provided space for the ISMA to "grow into" for the next decade or two. This purchase also represents a good investment for ISMA.

A life insurance company for ISMA members represents a business opportunity for the coming year. The House of Delegates must decide whether to move ahead on the opportunity. Besides offering a membership service and membership business opportunity, such a company presents the economic base for future membership services such as disability insurance, retirement funds, health and hospital insurance, professional liability insurance, etc.

The Executive Committee, staff and trustees coped with national issues during the Washington visitation. We told our Representatives and Senators—with the help of the AMA Washington office—that we wished cost containment by Voluntary Effort, catastrophic insurance by the private sector, no National Health Insurance (tax), and cost cutting —where possible—in governmental health programs.

These issues enter into state activities also. This year the role of the physician's assistant was clarified somewhat by regulations promulgated for the Medical Practice Act. Hopefully, the ISMA can aid in clarifying the role of the nurse practitioner—perhaps in the General Assembly. An Indiana court, as in other states, has taken up the chiropractic issue; and since courts frequently lean toward individual freedoms (protecting chiropractors), the ISMA must prepare to address this issue in the General Assembly.

Our delegation expressed to the AMA that we favored retaining our ethical statements, returning medical education to practicing physicians, and opposing National Health Insurance (tax).

Happily, the AMA House re-elected Lowell Steen as trustee of the AMA, and the AMA Board of Trustees then elected him chairman.

We observed PSRO problems and tried to protect physicians' interest in PSRO just as we attempt to protect patients' interest (and tax money) through I-MEDIC.

I believe the officers, trustees, and staff have represented you vigorously and diligently in the past year. I have served as your trustee for the past five years; I have cherished the opportunity to grow along with the ISMA. This year the trustees honored me by electing me board chairman.

I wish to continue serving you and other ISMA members in the future.

Alvin J. Haley, M.D.
Trustee

Thirteenth District

The Thirteenth District Medical Society annual meeting will be held Sept. 12, 1979 at Potawatomi Country Club in Michigan City. It will be hosted by President Dr. William Stark and Alternate Trustee Dr. John Luce. The Country Club Golf Course will provide an afternoon challenge followed by a business meeting, a super dinner, prizes and entertainment resulting in another successful annual meeting.

Dr. David Spalding is applauded for a fine meeting at Century Center in South Bend last year. A seminar on Negotiations by the AMA was followed by a well attended business meeting. Dr. Francis Kubik was reelected as our nominee to the Blue Shield Board. Dr. Dale Parshall was chosen president-elect and Dr. Jerry Quinn again won the secretary-treasurer position. Thank goodness our first constitution and bylaws were approved and now Mrs. Rose Vance officially represents the Society as executive secretary. Many prizes, excellent dinner, and entertainment by the Purdue Glee Club provided a memorable day.

The officers of the District continue to provide representation at the state level for all members. I urge your assistance and participation on the various ISMA commissions as well as those HSA and PSRO committees needing physician input. Your support in these many organized medical projects in the past year has been greatly appreciated.

Donald S. Chamberlain, M.D.
Trustee

Late/Supplemental Reports

Eleventh District

All of us were shocked and saddened by the untimely death of ISMA President James A. Harshman, M.D. The physicians of our district, our state and our nation have lost a friend and an outstandingly able leader.

This year's meeting will be hosted by the Howard County Medical Society Sept. 19 at the Kokomo Country Club.

Last fall's meeting, hosted by the Miami County Medical Society, was held at the Greenacres Country Club in Peru, Ind. During the business meeting Thomas R. Scherschel was elected president of the Eleventh District Medical Society. Frederick C. Poehler was reelected secretary and Herbert C. Khalouf was elected trustee. There was an excellent afternoon program for the ladies. The after dinner speaker was Richard "Digger" Phelps, head basketball coach at Notre Dame University.

I want to thank the members of the Eleventh District of ISMA for the privilege of serving as their trustee. During the past year many significant problems and issues have confronted the Board and some difficult decisions have been called for. Please contact me at any time that I can be of help to you.

Herbert C. Khalouf, M.D.
Trustee

Scientific Exhibits

George T. Lukemeyer, M.D. Indianapolis, Chairman

CEREBROVASCULAR OCCLUSIVE DISEASE IN NEUROFIBROMATOSIS

Exhibitor: United States Navy Medical Corps
575 North Pennsylvania St., Room 646
Indianapolis, Ind. 46204
Co-exhibitor: Health Science Education Command
National Naval Medical Center—Radiology Department
Bethesda, Maryland 20014
Attendant: Lt. David Mayo, USN

The presence of cerebral vascular occlusive disease in neurofibromatosis has received little attention. An understanding of the collateral pathways in this disease is essential in predicting which patient will ultimately exhibit insufficiency. The clinical and pathological features are described.

AN ANTI-SMOKING APPROACH FOR PRACTICING PHYSICIANS OF INDIANA

Exhibitor: Laurence H. Bates, M.D.
3130 N. Meridian Street
Indianapolis, Ind. 46208
Attendants: Sara Klare, Laurence H. Bates, M.D., and Debbie Wunder

This display consists of a collection of anti-smoking and smoking-cessation material currently available from federal government and private sources to assist the physician in dealing with the problem of cigarette smoking in his patient population, office environment, and hospitals in which he practices. Display materials will be available for anti-smoking programs in schools which will consist of a variety of anti-smoking lapel buttons, T shirts and bumper stickers which can be ordered for projects. Many physicians in Indiana use this material for office distribution to patients to promote smoking control.

AEROSPACE MEDICINE IN TODAY'S AIR FORCE

Exhibitor: United States Air Force
3919 Meadows Drive, Suite 1
Indianapolis, Ind. 46205
Attendants: Captain Sam Redding
Master Sergeant Bob Reese

The U.S. Air Force Medical Corps exhibit consists of a six-foot by eight-foot 12-panel montage depicting the practice of medicine in today's Aerospace Age. Each picture identifies a field of medicine commensurate with the civilian community, culminating in a total picture of Air Force Aerospace Medicine. In addition to the paneled montage, a video cassette television viewer will be available for use by association members. Films for viewing include six topics of "Emergency Medicine—The First Thirty Minutes" plus films on medical research being conducted at Air Force medical facilities.

DOCTORS HELPING DOCTORS— THE ISMA IMPAIRED PHYSICIAN PROGRAM

Exhibitor: Gerald P. Johnston, M.D.
3935 North Meridian Street
Indianapolis, Ind. 46208
Co-exhibitors: Richard W. Campbell, M.D.
Thomas E. Lunsford, M.D.
Wallace R. Van Den Bosch, M.D.
Laurence K. Musselman, M.D.
Attendants: Impaired Physician Peer Review Committee

Recent increase in public and professional concern over problems related to the impaired physician has emphasized the need to provide effective programs to deal with these problems. Many states have implemented formal programs for early recognition and rehabilitation of disabled physicians. The AMA has sponsored 3 national meetings on the Impaired Physician. The Indiana State Medical Association has established a committee on the Impaired Physician to develop programs for early recognition, identification, motivation, and rehabilitation of physicians impaired by alcoholism, drug abuse, neuro-psychiatric illness or physical infirmities.

The exhibit will consist of the following charts and posters:

1. Information concerning the magnitude of the problem and potential for rehabilitation.
2. Successful programs in other states.
3. The Indiana State Medical Association program.
4. The Impaired Physician Committee goals and objectives.
5. The flow sheet outline for referrals.
6. Treatment resources.
7. Selected references.
8. Impaired Physician Committee and Advisory Committee members.
9. Guide to getting assistance.
10. Recent articles and other informational materials will be available for distribution to interested physicians.

CONSULT I AUTOMATIC DECISION MAKING

Exhibitor: Edward A. Patrick, M.D., Ph.D.
P. O. Box 2122
West Lafayette, Ind. 47906
Co-exhibitor: James M. Fattu, M.D., Ph.D.
3700 Bellemeade Avenue
Evansville, Ind. 47715
Attendants: Edward A. Patrick, M.D., Ph.D.
James M. Fattu,M.D., Ph.D.
W. Thomas Spain, M.D., Ph.D.
Susan Fattu, B.S.
R. Uthurusamy, Ph.D.

Programmed medical information using the new micro-computers is usually entity oriented. This information is presented in a systematized didactic fashion with minimal input by the physician operator.

Utilizing the sciences of computer technology and statistics, Consult I has been programmed to think as a physician thinks when he begins to couple patient history with supportive data. These data are visually displayed on a screen with the physician making choices to arrive at a working diagnosis with appropriate possibilities displayed for consideration. The analysis does not direct you to do anything specifically. The choice of health care plan is the physician's prerogative.

Scientific Exhibits

HUMAN LEUKOCYTE ANTIGENS (HLS) AND UVEITIS

Exhibitor: T. F. Schlaegel, Jr., M.D.
Indiana University School of Medicine
Ophthalmology Department
1100 West Michigan Street
Indianapolis, Ind. 46223
Co-exhibitors: Daniel H. Spitzberg, M.D., FACS
Indiana University School of Medicine—Ophthalmology Department
The Davis-Duehr Eye Associates
University of Wisconsin School of Medicine
1025 Regent Street
Madison, Wis. 53715
Kenneth G. Julian, F.O.P.S.
Indiana University School of Medicine, Ophthalmology Department
Attendants: T. F. Schlagel, Jr., M.D.
Daniel H. Spitzberg, M.D.
Kenneth G. Julian, F.O.P.S.

The field of uveitis has been enriched by recent knowledge involving human leukocyte antigens. We will detail some of the associations with types of uveitis. For example, the use of the HLA-B27 test has enabled us to make a diagnosis in 32.9% of our cases of anterior uveitis which had previously been unclassified. In the presumed ocular histoplasmosis syndrome, patients with the maculopathy tend to have a positive test for HLA-B7. Those with peripheral histo spots only tend to have the same incidences of B7 antigen as in the population at large.

GLUCAGON FOR HYPOTONIC RADIOGRAPHY

Exhibitor: Stanley M. Chernish, M.D.
Eli Lilly and Company
P. O. Box 618
Indianapolis, Ind. 46202
Co-exhibitors: Roscoe E. Miller, M.D.
I. U. School of Medicine
Indianapolis, Ind. 46223
Rocco E. Brunelle, Indianapolis
Bernard D. Rosenak, M.D., Indianapolis
Attendant: Stanley M. Chernish, M.D.

Two double blind crossover studies compared tonicity and motility of the stomach, duodenum, and small bowel, following i.m. and i.v. administration of placebo, 0.25, 0.5, 1, and 2 mg. of glucagon. Fifteen subjects participated in each study and all received placebo and each dosage regimen.

Pulse and blood pressure were measured and subjects were questioned concerning side effects following examination.

Following i.m. dosage, considerable variation occurred in the number of volunteers responding. After 1 mg. hypotonicity occurred in 8 to 10 minutes and ranged in duration from 12 to 27 minutes. One mg. of glucagon produced moderate hypotonicity sufficient for satisfactory examination of the duodenum and small bowel in 100% and of the stomach in 60% of volunteers. Two mg. allowed stomach examination in 93%.

At all i.v. dosages, onset of response occurred in approximately 45 seconds. After 1 mg. i.v., duration of moderate hypotonicity ranged from 15 to 20 minutes.

There were no significant changes in blood pressure or pulse at any dosage level after i.m. or i.v. glucagon. Side effects were few and minimal with doses of 1 mg. or less.

Satisfactory stomach, duodenal, and small bowel hypotonicity for radiography can be obtained with 1 mg. of i.m., or 0.25 to 0.5 mg. i.v. glucagon.

PROFILES OF TREATED ALCOHOLICS

Exhibitor: Gerald P. Johnston, M.D.
1575 Northwestern
Indianapolis, Ind. 46202
Attendants: Gerald P. Johnston, M.D.
Bradley Boen, M.D.
Paul Flanagan, M.D.
Glenn Moak, M.D.
David Alvis, M.D.
Richard Campbell, M.D.
Thomas McConnell, M.D.
Harold Nichols, M.D.

Alcoholism is a chronic progressive disease in which excessive alcohol consumption results in serious physical complications, and affects all areas of the alcoholic's life with frequent family, social, economic, vocational and legal problems. There are over 10 million alcoholics in the United States and over 40 million people directly affected by alcoholism, and all of us are affected in some way by alcoholism. There are many misconceptions, even in the medical profession, about alcoholism, such as: Most alcoholics are derelict, unmotivated, difficult to treat and have very little success in recovery period. This exhibit will attempt to correct some of these misconceptions by describing the demographic, psychological, laboratory, detoxification and recovery programs for patients in an alcoholism treatment center.

The exhibit will include posters and charts showing:

1. Demographic data on 1,000 alcoholics.
2. Psychological profiles based on psychiatric evaluations and psychological testing.
3. Incidence of major physical complications and secondary medical diagnoses.
4. Laboratory profiles (incidence of laboratory, ekg, and x-ray abnormalities).
5. Incidence of hypertension vs transion elevation of blood pressure.
6. Detoxification routines and incidence of complications.
7. Rehabilitation and aftercare program participation.
8. Recovery patterns and one to two year follow-up.
9. Additional information on alcoholism and rehabilitation will be available at the booth.

THE GENETIC TIME BOMB—HUNTINGTON'S DISEASE

Exhibitor: Madison State Hospital
Madison, Ind. 47250
Co-exhibitor: Indiana Chapter of the Committee to Combat Huntington's Disease
Attendants: Wanda Wyne and T. W. Grant

1. Coronal section of a typical Huntington's chorea brain showing typical degeneration (photograph).
2. Coronal section of essentially normal brain (photograph).
3. Chart showing a family genealogy of a Huntington's Disease family.
4. Video-cassette machine—repeating 6-minute tape about Huntington's Disease victims.
5. National prefabricated exhibit from the Committee to Combat Huntington's Disease, Incorporated.
6. Exhibit chart and cards showing probability statistics of Huntington's Disease.
7. Pamphlets and handout literature.

Technical Exhibits

ABBOTT LABORATORIES
14th and Sheridan Road
North Chicago, Ill. 60064
Exhibit will feature Surbex-T (high potency vitamin B-complex with vitamin C), Erythrocin (erythromycin).
Stan Redman

AMEDD PERSONNEL PROCUREMENT FIELD OFFICE
U. S. Army Medical Department
Hawley US Army Health Clinic, Bldg. 300
Fort Benjamin Harrison, Ind.
United States Army Medical Department educational and career opportunities.
1LT Donald R. Poole and CPT. Jerry Cotton

BLUE CROSS and BLUE SHIELD OF INDIANA
120 W. Market St.
Indianapolis, Ind. 46204
Will be displaying Telephone Claims System. Will also have staff members present to answer questions.
Gary R. Miller

BOEHRINGER INGELHEIM, LTD.
90 E. Ridge
Ridgefield, Conn. 06877
The exhibit will feature Catapres (clonidine hydrochloride) and other ethical pharmaceuticals.

COMPUTERS, INC.
6810 N. Shadeland, Suite 104
Indianapolis, Ind. 46220
Exhibit will feature Qantel Systems, medical computer system. *Jay Craig, Kim Benner, Don Wambold, Laurie Gross and Bill Johnson*

DISTA PRODUCTS COMPANY
P.O. Box 618
Indianapolis, Ind. 46206
Pharmaceuticals will be displayed.
Roger Johnson

DOW CHEMICAL
P.O. Box 68511
Indianapolis, Ind. 46268
Exhibit will feature Lorelco® for reduction of hyperlipidemia and Novafed, a capsule to relieve colds and congestion.
David Kollman, Joe Keers and Steve Mack

IMMKE CIRCLE LEASING, INC.
800 N. Broadway
Peru, Ind. 46970
Exhibit will feature automobile leasing.
Clarence Fox and Tom Harrison

KOALA CENTER
1711 Lafayette Ave.
Lebanon, Ind. 46052
Comprehensive alcoholism treatment hospital.
Harold J. Thompson, Jackson Reed, Carleen Paul and John Merkle

ELI LILLY AND COMPANY
P.O. Box 618
Indianapolis, Ind. 46202
Pharmaceuticals will be displayed.
Steve Davidson, R. J. Broderick, Ed West, Chuck Bell, Dick Thomas and Larry Young

THE MEDICAL PROTECTIVE COMPANY
P.O. Box 15021
Fort Wayne, Ind. 46815
Professional liability insurance.
Kenneth W. Moeller, Douglas Sellon

MEDICO ELECTRONIC, INC.
2121 Production Drive
Indianapolis, Ind. 46241
The exhibit will feature Blood Analyser and Reagents.
Charles Chae, Frances Loh and Candy Johnson

KREMERS-URBAN COMPANY
P.O. Box 2038
Milwaukee, Wis. 53201
The exhibit will feature NITROL®—Nitroglycerin Ointment 2%—KU-ZYME & KUTRASE—enzymatic digestant with and without calmative antispasmodic—LEVSIN—(1-Hyscyamine, anticholinergic, antispasmodic—PRE-PEN—skin test for penicillin hypersensitivity.
Al Shike

JOHN H. PAYNE & ASSOCIATES
5506 E. 16th St.
Indianapolis, Ind. 46218
Audiology, speech pathology, and related services including hearing aids will be displayed.
John H. Payne, John H. Payne, Jr., Eric Smith and Robert H. Payne

Q. S. I., INC.
3025 Mishawaka Ave.
South Bend, Ind. 46615
The exhibit will feature microfilm billing service, pegboard supplies and filing systems.
Bill Erlandson, John Carrico, Carolyn Reaves and Pat Erlandson

W. B. SAUNDERS COMPANY
P.O. Box 40043
Indianapolis, Ind. 46240
Will exhibit its most recent medical books.
Tom Nicholls

Technical Exhibits

CLAYTON L. SCROGGINS ASSOCIATES, INC.
200 Northland Blvd.
Cincinnati, Ohio 45246
Professional practice management and financial planning for doctors exclusively since 1945.
Lee W. Scroggins and/or David C. Scroggins

TAB PRODUCTS OF INDIANA
810 E. 63rd Place
Indianapolis, Ind. 46220
The exhibit will feature color-coded, space-saving filing systems.
Douglas McPhail, John Rardon, Barbara Nastav and Roland Vanderperk

SYNTEX LABORATORIES, INC.
3401 Hillview Ave.
Palo Alto, Calif. 94304
Pharmaceuticals will be featured.

U. S. NAVY MEDICAL PROGRAMS OFFICE
575 N. Pennsylvania, Room 646
Indianapolis, Ind. 46204
Opportunities for physicians to become involved in a fulfilling group practice without administrative, financial or overhead concerns; residencies also available.
Lt. David Mayo and HMC Harvey Randolph

ISMA Committees and Commissions

COMMITTEES

EXECUTIVE
Paul W. Holtzman, Bloomington, chairman; Arvine G. Popplewell, Indianapolis, president; Joseph F. Ferrara, Franklin, treasurer; Douglas H. White, Indianapolis, assistant treasurer; Alvin J. Haley, Fort Wayne, chairman of the Board of Trustees; Eli Goodman, Charlestown, immediate past president; John Beeler, Indianapolis, at large.

FUTURE PLANNING
Peter R. Petrich, chairman; Stanley M. Chernish, Indianapolis; Vincent J. Santare, Munster; Jack Shanklin, Vincennes; E. Henry Lamkin, Indianapolis; Carl Otten (Student Liaison).

MEDICAL EDUCATION FUND
Donald E. Wood, Indianapolis, chairman; J. O. Ritchey, Indianapolis; John W. Beeler, Indianapolis; Joe E. Dukes, Dugger; Jack M. Lockhart, Connersville.

GRIEVANCE
G. Beach Gattman, chairman, Elkhart; William G. Bannon, Terre Haute; George T. Lukemeyer, Indianapolis.

MEDICO-LEGAL
John W. Beeler, Indianapolis, chairman.

NEGOTIATIONS
Alvin J. Haley, Fort Wayne, chairman; John W. Beeler, Indianapolis; Leonard W. Neal, Munster; Donald C. McCallum, Indianapolis; Herbert C. Khalouf, Marion.

IMPAIRED PHYSICIAN
Gerald P. Johnston, Indianapolis, chairman; Richard W. Campbell, Indianapolis; Wallace R. VanDenBosch, Lafayette; Thomas E. Lunsford, Indianapolis.

COMMISSIONS

CONSTITUTION AND BYLAWS
Lester H. Hoyt, Indianapolis, chairman; Thomas Kandul, Evansville; Russell Dukes, Bloomington; Claude J. Meyer, Jeffersonville; Henry Conrad, Lawrenceburg; Warren Macy, Greencastle; C. G. Clarkson, Richmond; Loren H. Martin, Indianapolis; Wallace A. Scea, Elwood; John J. Saalwaechter, Lebanon; Frank Moxley Sturdevant, Valparaiso; Robert M. Brown, Marion; William R. Clark, Sr., Fort Wayne; John B. Guttman, Wakarusa.

CONVENTION ARRANGEMENTS
Stanley M. Chernish, Indianapolis, chairman; Eugene Austin, Evansville; James N. Topolgus, Bloomington; Richard McIlroy; Columbus; Fred Haggerty, Greencastle; James Johnson, Richmond; Thomas Alley, Indianapolis; Clarence Ashburn, Muncie; Max Hoffman, Covington; Daniel T. Ramker, Hammond; Shirley T. Khalouf, Marion; T. A. Felger, Fort Wayne; Thomas A. Neathamer, Jeffersonville; Edward C. Wheeler, Indianapolis; John O. Hildebrand, South Bend; Garry L. Bolinger, Indianapolis.

LEGISLATION
Richard L. Reedy, Yorktown, chairman; L. Ray Stewart, Evansville; Paul J. Wenzler, Bloomington; Peter H. Livingston, Bedford; Edward L. Probst, Columbus; William Strecker, Terre Haute; Kenneth Woodman, Richmond; Martin Fundenberger, Indianapolis; Dennis Nicholas, Indianapolis; Leonard W. Neal, Munster; Tom Scherschel, Kokomo; Jerry Stucky, Fort Wayne; Robert M. Sweeny, South Bend; Paul Muller, Indianapolis; Dean Grove, Indianapolis; Malcolm O. Scamahorn, Pittsboro; John A. Knote, Lafayette; Carl Otten (Student Liaison).

PUBLIC RELATIONS
Marvin Priddy, Fort Wayne, chairman; Albert S. Ritz, Evansville; Thomas O. Middleton, Bloomington; Frank P. Lloyd, Indianapolis; Robert P. Acher, Greensburg; Greg Larkin, Greencastle; Ralph Lewis Rea, Greenfield; Richard Jordan, Corydon; John Osborne, Muncie; Kenneth J. Ahler, Rensselaer; Charles D. Egnatz, Schererville; Richard Glendening, Logansport; Logan Dunlap, South Bend; Harry G. Becker, Indianapolis; Ross Egger, Daleville

MEDICAL EDUCATION
Steven C. Beering, Indianapolis, chairman; Charles Hachmeister, Evansville; David A. Byrne, Bloomington; Richard Riehl, Jeffersonville; Brockton Weisenberger, Columbus; Cleon Schauwecker, Greencastle; James R. Lewis, Richmond; Hunter Soper, Indianapolis; Eugene Gillum, Portland; T. Neal Petry, Delphi; Rex Joseph, Indianapolis; Shokri Radpour, Kokomo; Ronald Scheeringa, Fort Wayne; Wallace S. Tirman, Mishawaka; Thomas A. Gehring, Merrillville; Franklin A. Bryan, Fort Wayne; John R. Mader, Richmond; John F. Phillips, Indianapolis; John Roscoe, Indianapolis.

MEDICAL SERVICES
H. Marshall Trusler, Indianapolis, chairman; Wallace Adye, Jr., Evansville; Donald D. Cofield, Bloomington; Everett E. Bickers, Floyds Knobs; H. S. Riley, Madison; Paul E. Humphrey, Terre Haute; Joseph L. Steinem, Connersville; Albert Donato, Indianapolis; John MacDougall, Indianapolis; Theodore R. Hayes, Muncie; Carl Bruce Howland, Crawfordsville; R. James Bills, Gary; Regino B. Urgena, Marion; R. Wyatt Weaver, Angola; Jack Hannah, Elkhart; Charles Aust, Ft. Wayne; Mary Ann Collins (Student Liaison).

Ad Hoc Committees

IMMUNIZATION
Robert Parr, Indianapolis, chairman

DATA PROCESSING
James H. Gosman, Indianapolis, chairman

THE INDIANA STATE MEDICAL ASSOCIATION

OFFICERS FOR 1978-79

President—Arvine G. Papplewell, 3530 S. Keystane, Indianapalis 46227

Treasurer—Jaseph F. Ferrara, 111 S. Water St., Franklin 46131

Assistant Treasurer—Dauglas H. White, 3524 N. Meridian, Indianapalis 46208

Executive Committee—Paul W. Haltzman, Chairman; Arvine G. Papplewell, Jaseph F. Ferrara, Dauglas H. White, Martin J. O'Neill, Jahn W. Beeler, Eli Gaadman, Alvin J. Haley, Members

Speaker af the Hause—Llayd L. Hill, 302 N. Duke St., Peru 46970

Vice Speaker—Lawrence E. Allen, 2009 Brawn St., Andersan

Executive Directar—Mr. Danald F. Fay

TRUSTEES

District	Term Expires
1—John A. Bizal, Evansville	Oct. 1980
2—Harold M. Monifold, Bloomington	Oct. 1981
3—Thomas A. Neothamer, Jeffersonville	Oct. 1979
4—Howord C. Jackson, Modison	Oct. 1980
5—Paul Siebenmorgen, Terre Haute	Oct. 1981
6—Davis W. Ellis, Rushville	Oct. 1979
7—Donald C. McCallum, Indianapolis	Oct. 1980
7—John G. Pantzer, Indionapolis	Oct. 1981
8—Jack M. Wolker, Muncie	Oct. 1981
9—John A. Knote, Lafoyette	Oct. 1979
10—Martin J. O'Neill, Valparaiso	Oct. 1980
11—Herbert C. Kholouf, Morion	Oct. 1981
12—Alvin J. Haley, Fort Wayne (Chairman)	Oct. 1979
13—Donald S. Chamberlain, South Bend	Oct. 1980

ALTERNATES

District	Term Expires
1—E. DeVerre Gourieux, Evansville	Oct. 1979
2—Edgar R. Cantwell, Vincennes	Oct. 1980
3—Richard G. Huber, Bedford	Oct. 1980
4—Mark M. Bevers, Seymour	Oct. 1979
5—William G. Bannon, Terre Houte	Oct. 1979
6—Dan W. Hibner, Richmond	Oct. 1981
7—I. E. Michael, Indianapolis	Oct. 1979
7—Gerald J. Kurlander, Indianapolis	Oct. 1979
8—Ted S. Doles, Middletown	Oct. 1979
9—Max N. Hoffman, Covington	Oct. 1980
10—Leonard W. Neal, Munster	Oct. 1982
11—Fred C. Poehler, La Fontoine	Oct. 1980
12—Franklin A. Bryan, Fort Wayne	Oct. 1980
13—John W. Luce, Michigon City	Oct. 1979

SECTION OFFICERS 1978-79

Sectian an Surgery
Choirman—Donold M. Schlegel, Indianapolis
Secretary—Ted W. Grisell, Carmel

Sectian an Internal Medicine
President—Douglas H. White, Indianapolis
Secy-Treasurer—William Bastnagel, Indianapolis

Sectian an Family Practice
Chairman—Bernard J. Emkes, Indianapolis
Secretary—Edwin E. Stumpf, New Haven

Sectian an Neuralagical Surgery
Choirman—Louis W. Conway, Lafayette
Secretary—Daniel F. Cooper, Indianapolis

Sectian an Ophthalmalagy and Otalaryngalogy
Chairman—John Bizal, Evansville
Secretary—Doniel R. Evans, Valparaiso

Sectian an Anesthesialagy
Chairman—Robert K. Stoelting, Indianapolis
Secretary—Deon L. Strycker, South Bend

Sectian an Public Health and Preventive Medicine
Chairman—Robert K. McKechnie, Jeffersonville
Secretary—David J. Edwards, Indianapolis

Sectian an Radialagy
Chairman—William J. Miller, Lafayette
Secretary—Wallace S. Tirman, South Bend

Sectian an Nervaus and Mental Diseases
Chairman—Philip M. Morton, Indianapolis
Secretary—Jeffrey J. Kellams, Indianapolis

Sectian an Pathalagy and Farensic Medicine
Chairman—David E. Smith, Indianapolis
Secretory—Emmett C. Pierce, Greenfield

Sectian an Pediatrics
Chairman—Robert Hannemann, Lafayette
Secretary—Stephen Bash, Fort Wayne

Sectian an Directars af Medical Educatian
Chairman—Barbara Backer, LaPorte
Secretary—Robert Chevalier, Beech Grove

Sectian an Cutaneaus Medicine
Chairmon—Wm. J. Cron, Bloomington
Secretary—Ronold H. Doneff, Gary

Sectian an Allergy
Chairman—Paul D. Isenberg, Indianapolis
Secretary—Beauford Spencer, Bloomington

Sectian an Uralagy
Chairman—Dovid Schlueter, Fort Woyne
Secretary—

Sectian an Orthapedic Surgery
Chairman—Frank B. Throop, Indianopolis
Secretary—Morris S. Friedmon, South Bend

Sectian an Emergency Medicine
Chairman—John C. Johnson, Brownsburg
Secretary—Esther Schubert, New Castle

DELEGATES TO THE AMA

Terms expire December 31, 1980:
Delegates: George T. Lukemeyer, Indianapalis; Malcolm O. Scamahorn, Pittsboro; Ross L. Egger, Daleville.
Alternates: Robert M. Seibel, Nashville; Everett E. Bickers, Floyds Knobs; Gilbert M. Wilhelmus, Evansville.

Terms expire December 31, 1979:
Delegates: Patrick J. V. Corcoran, Evansville; Peter R. Petrich, Attica.
Alternates: Thomas C. Tyrrell, Hommond; Marvin E. Priddy, Fort Wayne.

DISTRICT MEDICAL SOCIETY OFFICERS

District	President	Secretary	Place, Date of Meeting
1.	Frank L. Hilton, Evansville	John D. Pulcine, Evansville	May 15, 1980, Evansville
2.	Joe Dukes, Dugger	James P. Beck, Washington	Oct. 4, 1979, Dugger
3.	Francis H. Gootee, Jasper	Charles X. McCalla, Paoli	April 30, 1980, Jasper
4.	Mark M. Bevers, Seymour	Horry R. Baxter, Seymour	May 14, 1980
5.	Rohim Farid, Brazil	Clyde Jett, Seelyville	May 28, 1980, Brazil
6.	Jomes M. Lorber, Shelbyville	William F. Kerrigon, Cannersville	May 7, 1980
7.	Merrill M. Wesemann, Franklin	M. O. Scamahorn, Pittsboro	June 11, 1980, Franklin
8.	John D. Jones, Anderson	William C. Van Ness II, Summitville	
9.	Adrian Lanning, Noblesville	John A. Knote, Lafoyette	
10.	Lee H. Trachtenberg, Munster	Barron M. F. Palmer, Hammond	June 4, 1980
11.	Thomas R. Scherschel, Kokomo	Frederick C. Poehler, La Fontaine	Sept. 19, 1979, Kokomo
12.	Michael O. Mellinger, LaGrange	Robert H. Musselman, Fort Wayne	Sept. 20, 1979, Fort Wayne
13.	William A. Stark, Mishawaka	Michael G. Quinn, South Bend	Sept. 12, 1979, Michigan City

COUNTY MEDICAL SOCIETY DIRECTORY

County	President	Secretary
Adams	John E. Daan, Decatur	Hyung Soo T. Lee, 227 S. Second St., Decatur 46733
Allen (Fort Wayne)	Marvin E. Priddy, Fort Wayne	Fouad A. Halaby, 700 Broadway, Fort Wayne 46802
		Mr. Lorry L. Pickering, Exec. Dir., 2414 E. State Blvd., Fort Wayne 46805
Barthalamew-Brown	Robert G. Reed, Columbus	Stanley R. Adkins, 380 Plaza Drive #D, Columbus 47201
Bentan	A. L. Caddens, Earl Park	Manley K. Scheurich, R.R. 1, Oxford 47971
Baane	Danald Boyer, Lebanon	Charles Hodges, 905 N. Lebanon, Lebanon 46052
Carroll	Stephen C. Mayers, Flora	Robert Seese, 101 W. North St., Delphi
Cass	Joseph A. Frederick, Jr., Logansport	Joseph Wm. Bean, 2 Chase Park, Logansport 46947
Clark	Maurice E. Jahn, Jr., Jeffersonville	Wm. Louis Voskuhl, 935 Woter St., Charlestown 47111
Clay	Robert C. Oehler, Brazil	E. L. Canrod, 1207 E. Notianal Ave., Brazil
Clinton	Milton Erdel, Frankfort	William R. Stapleton, 1256 S. Jacksan, Frankfart 46041
Daviess-Martin	Marshall Seat, Washington	James P. Beck, 1312 Bedford Rd., Washington 47501
Dearborn-Ohia	Ronald Myers, Lawrenceburg	Gerald T. Bowen, 605 Wilson Creek Road, Lawrenceburg 47025
Decatur	Gene P. Gebeie, Greensburg	Arnald D. Ducanes, 215 N. Franklin St., Greensburg 47240
DeKalb	John C. Horvey, Auburn	Harland V. Hippensteel, 208 W. 7th St., Auburn 46706
Deloware-Blackford	Arthur C. Joy, Parker	Chas. J. Leiphart, 2311 W. Jackson St., Muncie 47303
Dubais	Francis Gootee, Jasper	Robert Bretz, St. Joseph Hospital, Huntingburg 47542
Elkhart	James D. Finfrock, Elkhart	Page E. Spray, 320 W. High St., Elkhart
Fayette-Franklin	Joseph L. Steinem, Cannersville	Joseph L. Steinem, 818 Grand Ave., Connersville 47331
Floyd	William V. Craft, New Albany	Doniel H. Cannon, 1201 E. Spring St., New Albany
Fountain-Warren	Hugh C. Brenner, Williamspart	Theadore Person, 601 N. Mill St., Veedersburg
Fulton	James P. Schalliol, Rochester	Joseph D. Richardsan, 121 West 8th St., Rochester 46975
Gibsan	James F. Peck, Princeton	R. E. Weitzel, 114 S. Hart, Princetan 47670
Gront	Miles W. Donaldson, Marion	E. S. Rifner, Van Buren
Greene	Robert Moses, Worthington	Harry Rotman, Jasanville
Hamilton	A. Adrian Lanning, Noblesville	Paul M. Waitt, 450 Lafayette Rd., Noblesville 46060
Hancock	Gary C. Sharp, Greenfield	Harry T. Hensley, 11929 E. 65th St., Oaklandon 46236
Horrison-Crawfard	W. J. Brockmon, Corydon	D. J. Dukes, 439 E. Chestnut, Carydan 47112
Hendricks	Joseph Kerlin, Danville	Wm. A. Edwards, 1655 Hawtharn Dr., Plainfield 46168
Henry	David Eggert, New Castle	Donald E. Vivian, Henry Co. Hospital, New Castle 47362
Howord	Thomas R. Scherschel, Kokama	Ronald T. Maus, 800 S. Berkley, Kokomo 46901
Huntington	William J. Webb, Huntington	Piyush J. Shah, 1159 Etna Ave., Huntingtan 46750
Jacksan	Mork M. Bevers, Seymaur	Joel M. McGill, 213 E. Crass St., Brownstawn 47220
Jasper	Michael Louck, Rensselaer	Francis E. O'Brien, Washington St., Rensselaer 47978
Jay	Eugene M. Gillum, Portland	R. J. Wilson, R.R. 1, Geneva 46740
Jefferson-Switzerland	Eltan Heaton, Madisan	Ott B. McAtee, Madison State Hospital, Madisan
Jennings	F. Richard Walton, North Vernan	John B. Schuck, Doctors' Park #2, 311 Henry St., Narth Vernan 47265
Johnson	Steven A. Weber, Franklin	Chandrabhon Singh, Johnson Co. Memorial Hospital, Franklin 46131
Knox	James A. Koontz, Vincennes	Jay R. Tuttle, 14 S. Third St., Vincennes 47591
Kosciusko	Michael P. Dacquisto, Warsaw	Steven P. Grossnickle, 2267 Dubois, Warsaw 46580
LaGrange	Millard R. Taylor, Howe	Evan C. Thompsan, P.O. Box 217, Tapeka 46571
Lake	Thamas A. Gehring, Merrillville	Mary E. Carroll, 124 N. Main St., Crown Point 46307
		Mr. John B. Twyman, Ex. Dir., 6685 Broadway, Merrillville 46410
LaParte	Donold L. Weninger, Michigan City	King S. Jones, P.O. Box 383, Michigon City 46360
		Orville A. Schumm, Exec. Dir., 110 Sauth Ave., La Parte 46350
Lawrence	Gerald E. Kasting, Bedford	Gareth A. Morgan, 1618—24th St., Bedford 47421
Madisan	William C. VanNess II, Summittville	Diane Von Ness, R.R. #4, Box 352A, Alexandria 46001
Marian	John D. MacDougall, Beech Grave	H. Marshall Trusler, 1144 Consolidated Bldg., Indianapalis 46204
		Mr. Harold W. Hefner, Exec. Dir., 211 N. Delaware St., Indianapalis 46204
Marshall	Marshall E. Stine, Breman	Byran Holm, 304 N. Walnut, Plymauth 46563
Miami	Maurice Sixbey, Denver	A. L. Baluyut, 29 E. Main, Peru 46970
Mantgomery	Fred P. Warbintan, Crawfordsville	Jack L. Foltz, 1407 Darlington Ave., Crawfardsville 47933
Morgan	O. R. Wilsan, Margantown	Joyce Branham, 2209 John R. Wooden Dr., Martinsville 46151
Newton	Marcelino F. Guzon, Moracco	John C. Parker, Bax 366, Gaadland 47948
Noble	John E. Ramsey, Kendallville	Carl F. Stallman, R.R. 3, Kendallville 46755
Orange	Charles X. McCallo, Pooli	Philip T. Hodgin, 420 N. Maple, Orleans 47432
Owen-Monroe	D. Dean Cofield, Bloomingtan	Robert Wrenn, 711 W. Secand St., Blaamingtan 47401
		Arlene Rhea, Exec. Secy, 1920 E. Third St., Blaamingtan 47401
Parke-Vermillian	Geargе Alexandrescu, Clintan	J. Franklin Swaim, P.O. Bax 185, Rockville 47872
Perry	Robert Gilbert, Tell City	Robert A. Ward, Prafessionol Bldg., Tell City 47856
Pike	Donald L. Hall, Petersburg	Donald L. Hall, 7th and Paplar, Petersburg 47567
Parter	Charles Griffin, Valparaiso	Owen H. Lucas, 700 S. Calumet Road, Chesterton 46304
Posey	John R. Crist, Mt. Vernon	Herman Hirsch, 130 W. 5th St., Mt. Vernon 47620
Puloski	Harold J. Halleck, Winomac	William R. Thampsan, 111 N. Monticella St., Winamac 46996
Putnam	Fred Haggerty, Greencastle	F. R. Dettloff, 407 Melrose Ave., Greencastle 46135
Randolph	Jerome M. Leahey, Union City	C. R. Miranda, 702 Brawne St., Winchester 47394
Ripley	Manuel G. Garcia, Batesville	A E. Jaojoco, Margaret Mary Haspital, Batesville 47006
Rush	Douglas W. Morrell, Rushville	Harry G. McKee, 208 W. First St., Rushville 46173
St. Joseph	Michael Conroy, South Bend	Richord Buck, 51916 U.S. 31 North, South Bend 46615
		Mrs. Rase Vance, Exec. Secy., 2015 Western Ave., Sauth Bend 46629
Scott	Manuel T. Doncel, Scottsburg	Wm. M. Scott, Medical Arts Bldg., Highway 31 Narth, Scattsburg 47170
Shelby	Dar Mucena, Shelbyville	William D. Haehl, 1640 East St. #44, Shelbyville 46176
Spencer	Michael O. Monor, Rockport	John C. Glockman, Jr., Rockport 47635
Starke	Yu Hong Law, Knox	Earl Leinbach, Pearl & Main, Hamlet 46532
Steuben	R. Wyatt Weaver, Angola	K. L. Kissinger, 411 E. Eilmore St., Angola 46703
Sullivan	John R. Taylor, Palestine	Joe Dukes, Sauth Third St., Dugger 47848
Tippecanae	Barbara J. Bourland, W. Lafayette	Paula Meluch, c/o 2323 Ferry St., Lafayette 47904
Tipton	J. H. Meredith, Tipton	A. E. Stauder, Jr., R.R. 4, Doctors' Park, Tipton 46072
Vanderburgh	John A. Bizal, Evansville	Mrs. Carole Rust, Exec. Dir., 421 N. Main St., Evansville 47711
Viga	Harvey C. Boyd, Terre Haute	James W. Cristee, 400 8th Ave., Terre Haute 47804
		William L. Purcell, Exec. Dir., P.O. Bax 986, Terre Haute 47801
Wabash	Charles R. Lyans, Wabash	Parks M. Adams, Jr., 1103 N. Wayne St., N. Manchester 46962
Warrick	Robert C. Calvin, Newburgh	Wm. G. West, Jr., P.O. Box 558, Newburgh 47630
Washington	Charles B. Carty, Pekin	Thomas R. Narthcatt, 102 N. Harrisan, Salem 47167
Wayne-Unian	Kenneth E. Sherer, Richmond	Byron Park, 1380 Chester Blvd., Richmond 47374
Wells	Louis F. Brodley, Bluffton	James E. Umphrey, 303 S. Main St., Blufftan 46714
White	Nolan A. Hibner, Manticella	Paul P. VanKirk, 105 W. Washington St., Manticello 47960
Whitley	Robert Rath, Columbia City	Alfred F. Allina, 19 Blue River E., Columbia City 46725

PHYSICIANS' DIRECTORY

CLINICAL, ANATOMIC PATHOLOGY

THE MEDICAL LABORATORY

OF

DRS. THORNTON, HAYMOND, COSTIN, BUEHL, BOLINGER & WARNER

301 EAST 38TH ST., INDIANAPOLIS, INDIANA 46205

Phone: (317) 925-6466

COMPLETE LABORATORY SERVICES

H. C. Thornton, M.D. (1902-1978)
J. L. Haymond, M.D., F.C.A.P.
R. L. Costin, M.D., F.C.A.P.
I. A. Buehl, M.D., F.C.A.P.
G. L. Bolinger, M.D., F.C.A.P.
T. M. Warner, M.D., F.C.A.P.
F. D. McGovern, Jr., M.D., F.C.A.P.
R. O. McClure, M.D., F.C.A.P.
R. P. Hooker, M.D., F.C.A.P.

- MICROBIOLOGY
- SEROLOGY
- CHEMISTRY
- SURGICAL PATHOLOGY
- HEMATOLOGY
- COAGULATION
- FORENSIC
- CYTOLOGY
- EKG
- VETERINARY PATHOLOGY
- TOXICOLOGY
- HOUSE CALL PHLEBOTOMY
- COURIER SERVICES

CLINICAL AND ANATOMIC PATHOLOGY

CARDIOLOGY

WILLIAM K. NASSER, M.D.
MICHAEL L. SMITH, M.D.
CASS A. PINKERTON, M.D.

are pleased to announce the addition of

JAMES W. VAN TASSEL, M.D.

for the practice of cardiology and cardiac catheterization

8402 Harcaurt Raad, Room 413 **Indianapolis 46260**
St. Vincent's Professional Building **(317) 257-9316**

Physician Referrol Only

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurological Surgery

1815 North Capitol Avenue Indionopolis 46202

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY

5506 East 16th St., Suite 24
Indianapalis 46218
Bia-Feedback Training for Migraine and Tension Headoche
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

PHYSICIANS' DIRECTORY

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
THOMAS L. McCONNELL, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

DAVID L. PHILLIPS, M.D.
JOHN J. SAALWAECHTER, M.D.
BEN H. PARK, M.D.
RITCHIE COONS, M.D.
Individualized Treatment for Alcoholism

KOALA CENTER



1711 Lafayette Avenue
Lebanon, Indiana 46052

(317) 482-3711

HAND SURGERY

By appointment Phone 317-783-1319
VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.
Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery
3530 S. Keystone, Suite 305 Indianapolis 46227

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.
Certified: American Board of Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons
Specializing in Colon and Rectal Surgery
214 Sherland Building
105 East Jefferson Blvd. South Bend, Ind. 46601

PSYCHIATRY

GORDON T. BROWN, M.D.
Diplomate, American Board of Psychiatry and Neurology
Adult and Adolescent
Psychotherapy, Consultation, Evaluation
Tel: (317) 923-3269
3266 North Meridian Street Indianapolis 46208

OPHTHALMIC PLASTIC SURGERY

Robert D. Deitch, M.D., F.A.C.S.

Fellow of the American Association of
Ophthalmic Plastic and Reconstructive Surgery

St. Francis Medical Arts Building
1500 Albany Street Suite 801
Beech Grove, Indiana 46107

PHONE ANSWERED 24 HOURS (317) 783-6187

OBITUARIES

Gerald E. Kasting, M.D.

Dr. Kasting, 56, a Bedford physician who was a past president of the Lawrence County Medical Society, died July 25. He collapsed after emerging from a cave in Bedford with a group of young spelunkers.

He was a 1949 graduate of the Indiana University School of Medicine and had served in the Army during World War II and the Korean War. He was a former chief of staff at Dunn Memorial Hospital in Bedford.

Dr. Kasting was a diplomate of the American Board of Family Practice.

Alvin E. Newman, M.D.

Dr. Newman, 85, formerly of Evansville, died July 15 at a hospital in Fort Lauderdale, Fla.

He was a 1923 graduate of the Indiana University School of Medicine. He left Evansville 24 years ago after retiring.

Dr. Newman, a senior member of the ISMA who was inducted into the Association's 50-year Club in 1973, was a member of the American Board of Urology.

Florence Smith Blackford, M.D.

Dr. Blackford, 81, a retired Indianapolis radiologist, died July 15 in an Indianapolis nursing home.

She was a 1934 graduate of the Indiana University School of Medicine.

A senior member of the ISMA, Dr. Blackford was a member of the American College of Radiology and the Roentgenology Society of North America.

Carroll B. Warren, M.D.

Dr. Warren, 66, a Marion obstetrician/gynecologist, died June 6.

He was a 1939 graduate of the Indiana University School of Medicine.

Paul H. Wilson, M.D.

Dr. Wilson, 82, a retired surgeon who formerly practiced in Logansport, died July 3 at his home in Orlando, Fla.

Dr. Wilson, a 1921 graduate of the Indiana University School of Medicine, practiced in Logansport from 1921 until 1977.

He was a senior member of the ISMA and joined the Association's 50-Year Club in 1971.

BEFORE YOU BUY OR LEASE, CONSULT WITH DAVE WAITE LEASING

At Dave Waite Leasing you will find all kinds of new automobiles and trucks on display for immediate delivery.

With rising automobile costs, before you buy, you must consider leasing whether it is for business or personal use. Consider that you can lease:

Gas-saving Compacts as little as $110* Sporty Intermediates as little as $130* Lease a Luxury car as little as $160*

*per month, for 36 month, (incl. tax)

Before you buy or lease, consult with us. Dave Waite Leasing is the leader and specialist.

Dave Waite Leasing

5199 N. Keystone/253-1501

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

Semi-retired GP wishes to share his centrally located medical office. Fully equipped, beautifully furnished and staffed. Free maintenance, utilities, and patient parking. Opportunity for flexible arrangement. Call 219-743-1178 or write to Dr. Alan R. Chambers, 101 Three Rivers Apts. East, Fort Wayne, Ind. 46802.

MEDICAL CLINIC FOR SALE—Two-year-old building located in Fowler, Ind. (approximately 100 miles from Indianapolis, 29 miles from Lafayette). Building contains 2,016 sq. ft., has five examination rooms, designed for one- or two-man operation. Attractive, assumable mortgage. Excellent opportunity. Contact Ruthann Sims or David Guthridge at Gallery of Homes, 113 E. 5th St., Fowler, Ind. 47944 or call at (317) 884-0470.

PSYCHIATRIST—Progressive CMHC in rapidly growing four-county catchment area headquartered in university city has an opening for a psychiatrist. The position will include both inpatient and outpatient work. Salary is competitive with excellent fringe benefits including liability insurance. Call or write James Youngman, M.D., or Personnel Officer, South Central Community Mental Health Center, 640 S. Rogers, Bloomington, Ind. 47401. Tel: (812) 339-1691.

PHYSICIAN WANTED—Family physician to associate with established, incorporated, ABFP doctor. O.B. optional. Benjamin D. Bennett, M.D., 402 S. Berkley Rd., Kokomo, Ind. 46901. Tel: (317) 457-4416.

PHYSICIAN—A fulltime Medical Director is needed to fill a position in an alcoholism treatment facility. A physician with empathy and expertise in the field of alcoholism is preferred. Competitive salary and benefits. For additional information, please send resume to OEI, 712 E. 65th St., Indianapolis, Ind. 46220.

SANIBEL ISLAND, FLORIDA—For rent: Beautifully furnished two-bedroom, two-bathroom condominium on the Gulf of Mexico. Screened porch. Sleeps up to six. Pool, tennis, and jacuzzi on premises. Golf courses nearby. Call (812) 332-5945 or (812) 339-6280.

Professional office space available in ideal west side Indianapolis Chapel Hill Professional Complex. 1240-3000 square feet. For information, call Mark Genung, (317) 271-1000.

MICHIGAN CITY, INDIANA—Emergency Department Director; flexible scheduling. Excellent income—$57,000 to $65,000. Paid malpractice insurance. Contact T.P. Cooper, M.D., 970 Executive Parkway, St. Louis, Missouri 63141, or call toll free 1-800-325-3982.

CHICAGO AREA EMERGENCY DEPARTMENT DIRECTORSHIP. Progressive 250-bed hospital in community situated outside congested metropolitan area. Emergency Medicine experience and ACLS certificate, or comparable proficiency level required. Excellent minimum guarantee with directorship bonus, flexible rotations, and superb malpractice program. To inquire, call Bill Salmo at 1-800-325-3982, toll free.

OPPORTUNITIES FOR PSYCHIATRISTS—There are current openings among the Indiana State Hospitals at some locations in the state for psychiatrists of most experience levels. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and normal on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, KY 42071 or call (collect) 502-753-9772. Forrest is retained by the Indiana Department of Mental Health.

EMERGENCY MEDICINE—Urbana, Illinois, Oct. 1, 1979: One director and two staff opportunities in 250-bed hospital emergency room seeing 10,000 annual patient visits. Twin-city university community just 125 miles from Chicago and Indianapolis, 175 miles from St. Louis. 48 hours per week/48 weeks per year. $55,000-$62,000 minimum guarantee, excellent professional liability coverage provided. Call Bill Salmo immediately at 1-800-325-3982 toll free.

Indy Plasma Center, 38th & Illinois, Indianapolis, Ind., is looking for a retired licensed physician as Medical Director for their blood plasma collection center. Duties involve physicals on prospective donors, emergency care and supervision of medical procedures. Hours are AM only and five days per week. If interested, call Mrs. B. Novak at 317-924-6336.

INFORMATION WANTED: The Indiana Historical Society is conducting a project to locate and record archives and manuscripts in Indiana. This includes: 1. Personal correspondence between two or more individuals or between individuals and organizations. 2. Personal diaries and journals. 3. Records (account books, minutes, reports, correspondence) of businesses, organizations, associations, clubs, churches and similar groups. Anyone wishing to record such items is asked to contact Donald E. Thompson, Wabash College, Crawfordsville, Ind. 47933.

The Indiana Historical Society is gathering information for a third volume of Indiana authors. It will include the years 1967 through 1979 (or 1980) and the names of all those omitted from the first two volumes. To be eligible one must have been born in Indiana or lived in the state for a number of years, and must also have written a pamphlet or book. Contact Donald E. Thompson, Wabash College, Crawfordsville, Ind. 47933.



"Efficiency is the key to your practice"
Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE
6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

Are You Moving?

If so, please send change of address to Membership Dept., ISMA, 3935 N. Meridian St., Indianapolis, IN 46208, at least six weeks before you move.

Name _____

Address _____

City _____ State _____ Zip _____

County _____

IMPORTANT — Attach mailing label from your last Journal here.

ADVERTISERS IN THIS ISSUE

September 1979 Vol. 72 No. 9

Americana Healthcare Center 670
Beltone Electronics Corp. 640
Blue Cross-Blue Shield 617
Brown Pharmaceutical Co., Inc. 635
Burroughs Wellcome Co. 615
Business Furniture Corporation 630
Campbell Laboratories, Inc. 654
Commercial Announcements 729
Dave Waite Leasing 728
Eli Lilly and Company 655
Hanger Protheses 666
Immke Circle Leasing, Inc. 665
Indiana CPA Society 619
Indiana Medical Bureau 669
McClain Car Leasing, Inc. 648
Mead Johnson Pharmaceutical Div. 658
Medical Protective Co. 645
Merck Sharpe & Dohme 656
Merrell-National, Inc. 620, 621, 632, 633, 634, 656, 657
Morris Plan 620
P&SLI 663
Physicians' Directory 726
Porsche + Audi 627
Professional Careers Institute 730
Raintree Realty 667
Roche Laboratories Covers, 622
Smith, Kline & French 631
Townsend, J. Russell and Associates 629
U.S. Air Force 653
Warner/Chilcott 625
Warner-Lambert 664

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

October 1979 • Vol.72 • No.10

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

The Library, Acquisitions Dept
SAN FRANCISCO, CA 94143

Medicine in the Nuclear Age

LIBRARY
U.C. SAN FRANCISCO
NOV 5 1979

130th Annual Convention of the Indiana State Medical Association

October 13-17, 1979

Sheraton West Hotel
Indianapolis, Indiana



PERFORMANCE. PROVEN EFFECTIVENESS WITHIN A WIDE SAFETY MARGIN.



While Roche Laboratories already knows more about the performance of Librium than anyone else, we keep on learning every day.

For example, the highly favorable benefits-to-risk ratio of Librium is a well-documented matter of record.

And, of course, the specific calming action of Librium has been demonstrated in millions of patients around the world. In a large number of these patients, Librium was used concomitantly with other primary medications.

Proven performance within a wide safety margin. Basically, that's what Librium is all about.

LIBRIUM® Ⓡ

chlordiazepoxide HCl/Roche

THE ANXIETY-SPECIFIC

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

ROCHE

Roche Products Inc.
Manati, Puerto Rico 00701

MEDICAL MUSEUM NOTES

CHARLES A. BONSETT, M.D., Indianapolis



Indiana Hospital for the Insane

The illustration on this page is the original Indiana Hospital for the Insane, built by Dr. John Evans, mentioned previously in this column.

The hospital no longer exists, having been razed just before World War II. Built during the years 1846-1848, the style of architecture is Greek revival. The unique feature of the building is not its Greek characteristics, but rather its structural characteristics, which are not evident from external observation. The building was an early example of what was known as Kirkbride architecture.

Dr. Kirkbride, one of the founders in 1844 of what is now the American Psychiatric Association, made a specialty of the architecture for the insane. Housing such patients posed a number of problems, the primary consideration being the danger of fire, since open fires in fireplaces were a necessary part of the heating system, and illumination was provided by the open flame of whale oil lamps. These buildings were constructed in units separated by massive fire walls, so that in event of fire, the conflagration would be contained.

The hospital's annual reports indicate that the State Legislatures have always been miserly in providing for its needs. For example, after the building was erected, the superintendent repeatedly called attention to the danger of fire. He emphasized that there was plenty of water in nearby Eagle Creek, and that the hospital had an adequate steam-operated pump, but that there was no hose provided.

In erecting the building, Dr. Evans pleaded for a copper roof. Copper, he argued, was the best material available, and although it was also the most expensive, it would be the most reasonable to maintain. Further, he argued, the building would one day become old and need to be replaced, at which time copper would have resale value, in contrast to other roofing materials available. Dr. Evans' pleas were ignored. The building was roofed with slate. Unfortunately, a good quality of slate was not used. As one looks through the annual reports of the hospital, the expense for maintaining the roof is found to be a most considerable item, far exceeding the cost of copper. Of further interest is the fact that the building was razed at a time when the price of copper was at premium.

Dr. Evans moved to Chicago when the hospital construction was completed. He was asked to remain as superintendent, but he declined. The conception of the hospital had been his brainchild entirely. In leaving the completed hospital, Dr. Evans urged that the hospital's operation be kept free of politics. This advice was, of course, not heeded. The dirty politics that followed, which peaked in the 1880s, were largely responsible for the election of Benjamin Harrison as President in 1888.

How the hospital was so influential in a national election is just one of the many interesting things about its history. This history will be told by Dr. Charles Hazelrigg on Saturday, Nov. 3 at 3:30 p.m. at Stouffer's Inn, 2820 N. Meridian St., Indianapolis. Everyone is welcome. This is the Annual Fall Conference of the Indiana Historical Society, in which the Medical History Section participates.

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Vol. 72, No. 10
OCTOBER 1979

USPS 284-440
ISSN 0019-6770

Editorial & Advertising Office:
3935 N. Meridian St.,
Indianapolis, Ind. 46208

EDITOR
Frank B. Ramsey, M.D.
MANAGING EDITOR
Martin T. Badger
BUSINESS MANAGER
Donald F. Foy

CONSULTING EDITORS
Charles A. Bonsett, M.D.
A. W. Cavins, M.D.
Samuel R. Mercer, M.D.
Lall G. Montgomery, M.D.
W. D. Snively, M.D.
I. W. Wilkens, M.D.

EDITORIAL BOARD
Elton Heaton, M.D.
Rodney A. Mannion, M.D.
(Terms expire Dec. 31, 1979)
Alvin J. Haley, M.D.
Wei-Ping Loh, M.D.
(Terms expire Dec. 31, 1980)
Steven C. Beering, M.D.
Paul S. Rhoads, M.D.
(Terms expire Dec. 31, 1981)

THE JOURNAL of the Indiana State Medical Association is published monthly in the interests of the medical profession of Indiana. No copyright claimed. Copyright rests solely with authors, who are responsible for statements made in their articles. Views expressed do not necessarily reflect the opinions of the editors. Scientific and editorial contributions are accepted for exclusive publication, subject to editorial requirements.

All issues since 1967 available on microfilm from University Microfilms, Inc., 300 N. Zeeb Rd., Ann Atbor, Mich. 48106. Indexed in Index Medicus and Hospital Literature Index.

Advertising rates and data available on request. Representative for national advertising: State Medical Journal Advertising Bureau, Inc., 711 South Blvd., Oak Park, Ill. 60302.

Publication deadline: 1st day of month preceding month of issue.

Subscriptions: $14 per year, USA; $16, Canada; $17, foreign; $12, libraries; $10, senior ISMA members; $8, members; except for special issues, single copies not available. Subscriptions renewable only in January and July.

Second-class postage paid at Indianapolis Ind. and additional mailing office.

SCIENTIFIC ARTICLES

753 **Small Airways Disease—**
Stephen J. Jay, M.D.
(21st Continuing Medical Education article)

762 **The Five Fingers of Cardiology—**
R. Joe Noble, M.D.

764 **Part 1: Secondary Somatic Problems—**
David F. Wehlage, M.D.

767 **Guidelines: Filter Paper T_4 and TSH Screening Tests—**
Ira K. Brandt, M.D.

768 **Pathophysiology of Peptic Ulcer Disease—**
James Y. McCullough, Sr., M.D.

771 **Maternal Mortality in Indiana: 1959-1977—**
William Ragan, M.D.

SPECIAL FEATURES

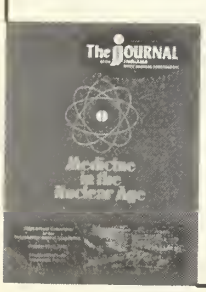
736 **Editorial Notes**

738 **Guest Editorial: Dog Chases Tail**

743 **Guest Editorial: Comforting Certainties**

DEPARTMENTS, MISCELLANEOUS

731 **Museum Notes**
734 **What's New?**
744 **Letters**
748 **Auxiliary Report**
748 **There's a Word for It**
776 **Cancer Corner**
782 **Future File**
787 **Book Reviews**
793 **CME Quiz**
794 **News Notes**
794 **Jail Project Update**
798 **Obituaries**



ABOUT THE COVER

The 130th Annual Convention of the Indiana State Medical Association Oct. 13-17 is dedicated to medicine in the nuclear age of technology and treatment, and to its 136th president, James A. Harshman, M.D., 1930-1978, a devoted practitioner of the art.



A simple solution for beating the high cost of feeding babies.

Powdered Soyalac mixed with water (according to ctions on the label) is an inexpensive, soy-based nt formula your patients can buy.

Up to 50% less expensive than ready-to-serve mulas.

Up to 25% less expensive than liquid concentrates. uding our own!

Soyalac is the only leading milk-free infant for-la available as an inexpensive powder. It provides ctly the same nutritional balance as Soyalac's con-centrated and ready-to-serve infant soy formulas – a a fraction of the cost.

Your patients who use formula will appreciate knowing about it.

For detailed information and samples, please cal or write the Soyalac sales representative in your area

Loma Linda Foods 11503 Pierce Street
Riverside, CA 92515 (714) 785-2475
Loma Linda Foods 13246 Wooster Road
Mount Vernon, OH 43050 (614) 397-7077

Loma Linda

WHAT'S NEW?

GENERAL ELECTRIC has a new patient examination gown made of Tyvek®, a non-woven fiber that is stronger than paper, yet soft and comfortable. The gown is sold in three styles, standard, wrap-around and economy. The standard style is designed for use in x-ray.

THE 3M COMPANY has protective pads for heels and elbows, designed to protect against formation of decubitus ulcers. They also are useful in treatment of pressure ulcers. They are self-adherent and incorporate a lattice design which gives flexibility needed to fit around elbows and heels. The lattice also provides ventilation. No straps or elastic are necessary. Can be worn while bathing and will blot dry.

HEWLETT-PACKARD announces a new 8-page booklet, *HIS Bundle and Epicardial Electrograms—Clinical Applications* (AN-760). It reviews basic cardiac conduction physiology, lists conduction disorders studied by electrogram recording techniques, and defines typical electrogram measurements. Write to Inquiries Manager, 1507 Page Mill Road, Palo Alto, Calif. 94304.



HANGER PROSTHESES OFFERS BOOKLET ON AMPUTATIONS

This booklet has been designed for those physicians whose practice includes amputation. Limb Prosthetics gives ready reference for each site of amputation as well as the prostheses recommended for each site.

Over 100 years of experience gained by the Hanger organization have gone into this carefully illustrated booklet. Illustrations include amputation sites for the leg and the arm, various Hanger prostheses and methods of suspension, post-operative care and preparation for prosthesis, plus selected photographs showing the child amputee and training for the above-knee patient.

We believe that you will find Limb Prosthetics a most useful booklet and a valuable source of quick information. To obtain your copy, please write or phone the Hanger office nearest you.

Hanger PROSTHESES

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807

DETECTO SCALES COMPANY has a new Physician's Scale, Model 339, which can be read from both the doctor's and the patient's side in pounds and in kilos. The numerals are color coded. It also is fitted with a telescoping height rod.

BIC PEN CORPORATION is expanding its disposable shaver line with the BIC Medical Shaver. It combines the advances of the BIC Shaver with unique design features of a prep razor at minimal cost. The blade is bonded to the handle to avoid nicking due to misalignment.

ICN PHARMACEUTICALS announces Insta-Glucose, a dose of 12.4 grams of glucose in a gel and contained in a single-dose collapsible tube for quick relief of hypoglycemia in patients with insulin dependent diabetes. Recommended for diabetic patients and those other patients with hypoglycemia. It is better than candy and other sucrose-containing agents since sucrose must first be hydrolyzed by digestive process before glucose is available to the patient.

ARNAR-STONE LABORATORIES has a new Rap-Add™ System for adding Intropin® (dopamine HCl to the intravenous very quickly in a critical situation. The medication is packaged in a one-piece needle/medication unit and may be introduced swiftly into the bottle or bag.

COBE LABORATORIES have a set of newly designed stopcocks for the hemodynamic monitoring system. They are transparent and color-coded. Air bubbles are easily removed. Red, yellow or blue indicates arterial line, pulmonary wedge catheter or CVP line. Available in one-way, three-way and double three-way.

HEWLETT-PACKARD has a new booklet, *A Technician's Guide to Stress Testing* (AN-759). It outlines the why's, what's and how's of stress testing. There also is a 10-page color brochure describing four HP stress testing systems. Both publications are available at no charge by writing Hewlett-Packard at Andover, Mass.

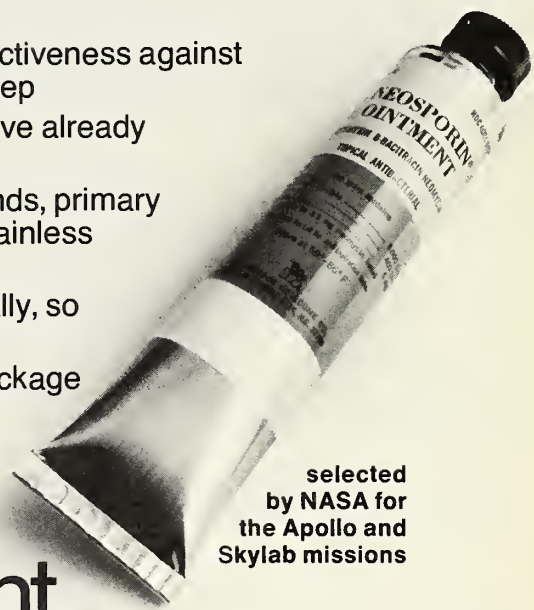
THE 3M COMPANY has responded to requests of ostomy patients for 1½-inch tape for use around ostomy appliances. The new multiroll "Ostomy Pack" contains both 1-inch and 1½-inch tape packaged for home use and sold at a significant saving. Both Micropore and Duropore tapes have a hypoallergenic adhesive and are available in either white or skintone.

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

IT'S HIGHLY RECOMMENDED... AND FOR GOOD REASONS



1. provides broad-spectrum, overlapping antibacterial effectiveness against common susceptible pathogens, including staph and strep
2. helps prevent topical infections, and treats those that have already started
3. it's good medicine for abrasions, lacerations, open wounds, primary pyodermas, secondarily infected dermatoses; and it's painless and cosmetically pleasing
4. contains three antibiotics that are rarely used systemically, so the risk of sensitization is minimal
5. you can recommend it in any of the three convenient package sizes: 1 oz tube, ½ oz tube, or the versatile, single-use foil packet



selected by NASA for the Apollo and Skylab missions

NEOSPORIN® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

EDITORIALS

Are Heat Treatments Effective In Fighting Cancer Cells?

The M. D. Anderson Hospital and Tumor Institute is investigating the effect of hyperthermia on cancer cells. A machine similar to a heart-lung machine heats the blood in whole body hyperthermia. Internal monitors in the esophagus and bladder enable control to within one-tenth of a degree. Temperatures as high as 109.4 F are possible for a short time. Treatments are given both with and without chemical agents. High temperature alone may reduce the size of the tumor. Much more study will be needed to determine whether chemicals add to the effect.

VA Medical Records To Be Held Indefinitely

Complete Veterans Administration medical records will be retained indefinitely pending a review of agency standards. Because of the possible long range effects of exposure to radiation and herbicides during military service, original records may be valuable for many years to come. Medical data are never lost due to conversion of the record to microform 15 years after a veteran's last treatment; however, for the time being, the raw records will be preserved, just in case.

Number of M.D. Graduates Nearly Doubles in 10 Years

Medical manpower numbers are impressive. In 1977 there were 421,278 M.D.s in the U.S., 332,393 of whom were engaged in patient care. This was an increase of 11,000 over 1976.

In 1966 there were 89 medical schools with 33,423 total enrollment and 7,743 graduates.

In 1977 there were 122 schools with enrollment of 60,456 and 14,393 graduates.

FIRE! Do You Know How To Put One Out?

"Portable Fire Extinguishers: Selection, Placement and Use" is the title of a sound/slide presentation from the National Fire Protection Association. Selling for $55, it consists of 90 color 35mm slides, a 12-minute synchronized cassette tape and an instructor's manual.

Employees should know how to use extinguishers; proper ones should be available and everyone should know which type is indicated for various types of fires. Order from NFPA Publications Sales Dept., 470 Atlantic Ave., Boston 02210.

THE INDIANA STATE MEDICAL ASSOCIATION

3935 N. Meridian, Indianapolis 46208—Telephone 925-7545

1979 Annual Meeting—Oct. 13-17—Indianapolis

OFFICERS FOR 1978-79

President—Arvine G. Papplewell, 3530 S. Keystone, Indianapolis 46227

Treasurer—Joseph F. Ferrara, 111 S. Water St., Franklin 46131

Assistant Treasurer—Douglas H. White, 3524 N. Meridian, Indianapolis 46208

Executive Committee—Paul W. Haltzman, Chairman; Arvine G. Papplewell, Joseph F. Ferrara, Douglas H. White, John W. Beeler, Eli Gaodman, Alvin J. Haley, Martin J. O'Neill, Members

Speaker of the House—Lloyd L. Hill, 302 N. Duke St., Peru

Vice Speaker—Lawrence E. Allen, 2009 Brown St., Anderson

Executive Director—Mr. Donald F. Foy

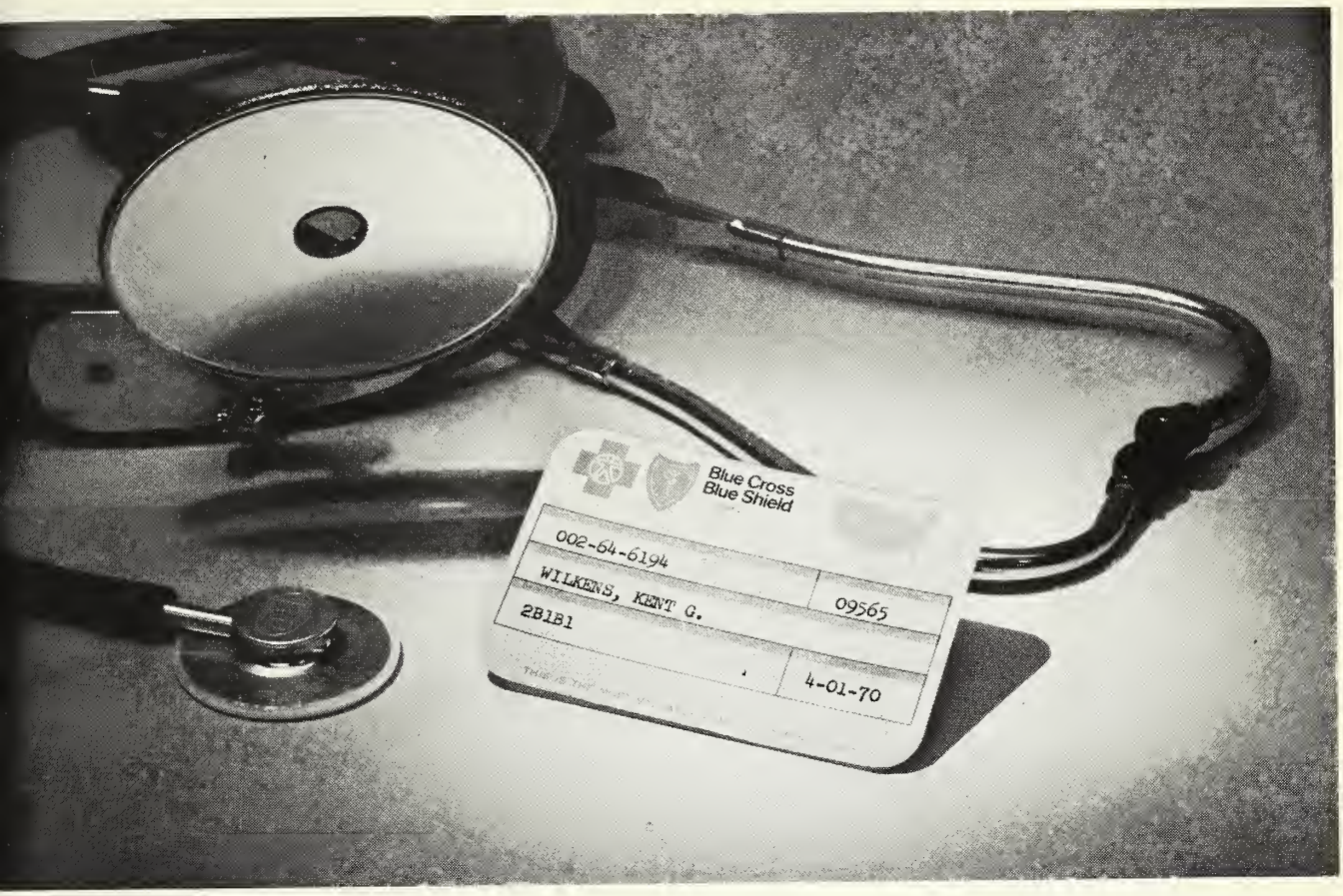
TRUSTEES

District	Term Expires
1—John A. Bizal, Evansville	Oct. 1980
2—Harold M. Manifold, Blaomingtan	Oct. 1981
3—Thomas A. Neathamer, Jeffersanville	Oct. 1979
4—Howard C. Jackson, Madison	Oct. 1980
5—Paul Siebenmorgen, Terre Haute	Oct. 1981
6—Davis W. Ellis, Rushville	Oct. 1979
7—Donald C. McCallum, Indianapolis	Oct. 1980
7—John G. Pantzer, Indianapolis	Oct. 1981
8—Jack M. Walker, Muncie	Oct. 1981
9—John A. Knote, Lafayette	Oct. 1979
10—Martin J. O'Neill, Valparaiso	Oct. 1980
11—Herbert C. Khalouf, Marion	Oct. 1981
12—Alvin J. Haley, Fort Wayne (Chairman)	Oct. 1979
13—Donald S. Chamberlain, South Bend	Oct. 1980

ALTERNATES

District	Term Expires
1—E. DeVerre Gourieux, Evansville	Oct. 1979
2—Edgar R. Cantwell, Vincennes	Oct. 1980
3—Richard G. Huber, Bedford	Oct. 1980
4—Mark M. Bevers, Seymour	Oct. 1979
5—William G. Bannon, Terre Haute	Oct. 1979
6—Dan W. Hibner, Richmond	Oct. 1981
7—I. E. Michael, Indianapolis	Oct. 1979
7—Gerald J. Kurlander, Indianapolis	Oct. 1979
8—Ted S. Doles, Middletown	Oct. 1979
9—Max N. Hoffman, Covington	Oct. 1980
10—Leonard W. Neal, Munster	Oct. 1981
11—Fred C. Poehler, La Fontaine	Oct. 1980
12—Franklin A. Bryan, Fort Wayne	Oct. 1980
13—John W. Luce, Michigan City	Oct. 1979

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- One full year in-hospital care
- 100% semi-private room and hospital extras
- Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy
- $250,000 Major Medical Benefits

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Mel Torbeck, Mass Marketing Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4340.

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark. Nat'l Assn. of Blue Shield Plans

Blue Cross
Blue Shield
of Indiana

EDITORIALS

Intraocular Lens Implant Patients Need Medic Alert Protection

Medic Alert Foundation International, which provides medical identification for individuals with hidden medical problems, has added the intraocular lens implant to the list of conditions for which the Medic Alert Bracelet is appropriate. Indirect dilation of the pupil may dislodge the implant. General medical and surgical physicians, particularly anesthetists and neurologists, should be apprised of intraocular lenses.

Human Growth Hormone

Human growth hormone (HGH) has been produced by molecular biological techniques. Genentech, Inc. of San Francisco, producer of human insulin and somatostatin by similar technology, combines the genes of different bacteria to form hybrid molecules.

HGH has been extracted from pituitary glands in the past. However, this natural source cannot be utilized for a plentiful supply of the hormone. The artificial method will be much more productive and will enable the investigation of further possible uses for HGH in addition to its use in the treatment of hypopituitary dwarfism.

Guest Editorial

Dog Chases Tail

L. A. ARATA, M.D.
Shelbyville

I once had a dog-owning friend whose pet spent much time running around in circles chasing its tail. When it caught it in its teeth, it chewed it a short time; then it reversed itself to circle in the opposite direction and repeat the process. It would continue this meaningless back-and-forth exercise to exhaustion. The net effort was funny to watch for a time, but the observer would get bored with the antics before the dog did.

The antics of our government and bureaucracy in Washington remind me of the senseless running in circles of that dog.

President Carter speaks of an energy crisis and the need for conservation. The Bureaucracy responds by discouraging increased production and mandates increased consumption by pollution-control devices on our automobiles.

Almost every adult citizen recognizes that *inflation* is our No. 1 problem. Even the President and the Congress give lip service to that concept. The Bureaucracy responds by mandating expensive useless pinball-type lights and bells on our cars that further inflate their prices.

Hospital and health care costs are pictured as too expensive. The Bureaucracy responds by mandating further rules and paperwork that drive the costs ever higher.

Drug costs are claimed to be too high. The bureaucratic response is to throw further road blocks into the path of the discovery and utilization of newer, more effective drugs.

Our international espionage or intelligence gathering systems are flawed and less than 100% reliable and effective. The government response is rules and regulations that make them less effective and reliable.

Our dollar is valued at its true worth in the international money markets (about 10% of what is was worth a generation ago). Government response is to export more dollars to nations and petty dictators around the world who are much richer and better off than our own debt-riddled country.

This recital could continue until it comprised a volume to rival *War and Peace* or *Gone With the Wind* but I terminate it here with the thought of how wonderful it would be if our dog-brained government would stop running around in senseless circles over every problem, and get out of the way of the people and organizations in our country who would and could apply greater brain work to our domestic and international problems. What a Utopian change of pace for the American taxpayer!



Tagamet®

brand of

cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

When painful spasm is the presenting symptom...



...in the functional bowel/irritable bowel syndrome*

Bentyl®

(dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

8-4420 (Y736A) MNR-804

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences–National Research Council and/or other information, FDA has classified the following indications as "probably" effective

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention, blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia, nausea, vomiting, impotence, suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

WHAT'S NEW?

IN BOOKS...

CROWELL PUBLISHERS have released *The Dictionary of Medical Folklore.* Written by Carol Ann Rinzler, it explores the why's and wherefore's of more than 500 adages sustained by popular belief. All the myths are dissected, many are debunked, and some are found to be at least partially true. $10.

DOUBLEDAY has just published *Sports Conditioning* by Frank O'Neill, a physical therapist and former trainer, and Bill Libby, a sportswriter. It covers physical conditioning in preparation for sports and emphasizes the importance of warm-up exercises. The emergency care of sport injuries is covered fully. 216 pages, $10.

VAN NOSTRAND REINHOLD announces a book, *Childhood Encopresis and Eneuresis: Causes and Therapy,* by child psychiatrist Charles E. Schaefer, Ph.D. He teaches that dysfunctions of bladder and bowel control are primarily psychological in origin. He discusses the causal factors for each problem and gives a clear description of practical and psychological approaches to treatment. 192 pages, $13.95.

DELL PUBLISHING released a paperback in September entitled *The New Vegetarian: Building Your Health Through Natural Eating.* The author is Gary Null, director of the Nutrition Institute of America. Dr. Robert C. Atkins, author of *Superenergy Diet* and *Dr. Atkin's Diet Revolution,* describes the book as "A storehouse of nutritional information that is useful even to me—and I'm a meat eater!" $4.95.

AVI PUBLISHING announces two books that may be obtained directly from the publisher. *Alcohol and the Diet* deals with the effects of alcohol abuse on eating habits, food intake, nutrient absorption and metabolism. *Drug-Induced Nutritional Deficiencies* has received an award. Daphne A. Roe, M.D., Professor of Nutrition at Cornell University, is author of both books.

ANCHOR PRESS/DOUBLEDAY has released *Single Father's Handbook* by Richard H. Gatley, Ph.D. and David Koulack, Ph.D. It is a guide for separated and divorced fathers. The authors are both psychologists and are both single fathers. PUBLISHERS WEEKLY says: "Gatley and Koulack explain that it may take time for an individual preoccupied with the breakdown of a marriage to fully realize that it is a family—not just a couple that is being separated. Single fathers suddenly hit with this reality will welcome this straightforward and supportive book. Single mothers might find some useful tips also." Paperback, 216 pages, $4.95.

Guest Editorial

Comforting Certainties

D. L. STEWART, M.D.
Louisville, Ky.

". . . Medicine of the whole person." Mr. Z was pleasant, but insistent. "My wife needs a doctor and I want to know if you practice medicine of the whole person." He was quite certain of the meaning of his phrase, but I wasn't at all sure what his particular definition of it meant to him. So now we will see her and find out if I practice what he preaches.

Undoubtedly he is sincere and we will likely find plenty of common ground. Possibly he read an article or heard a program saying that many different elements must be considered in dealing with illness and suggesting that this is a revolutionary concept. Such articles seem to give rigid criteria and promise marvelous results, but suggest that most physicians instead avoid a unitized approach through selfishness or ignorance. These articles go on to decry, particularly, specialization and the scarcity of old-time values like house calls. Sometimes we are pilloried for our hesitancy about Laetrile, Senator Kennedy, megavitamins, lumpectomies and the economics of generic drugs.

What I would like to help Mr. Z understand is that, quite sincerely, physicians are often wrong and do not always manage to see every aspect of all illnesses in each person treated. But most of us try—sometimes by design, often by instinct. Some physicians actually treat only an anus or an asthma. Some are greedy. Some are in deep trouble. Some are dishonest. But most are not. Most are meticulous, conservative and cautious because experience has so taught us. Before the splendid complexity of homo sapiens dealing daily with his ills, an honest physician stands humble, quizzical and charmed.

Yes, the physician tires. Our practices are not always exhilarating or even rewarding. We may fail to integrate, to see the big picture. I'll venture that I could come up with more examples of physician failure than Mr. Z ever dreamed possible, but I could come up with the opposite, too. I could tell him of the successes when an internist sensed instinctively that a case of asthma could not be dealt with by medicines alone—the sufferer must first leave the parental home. There was the opthalmologist who knew inflammation could not be vanquished until the too busy executive developed a new purpose. There was a psychiatrist who sensed that an addict must find a faith to displace the craving.

I wish him to know further that we can all give instances of inexplicable cures, of people who couldn't possibly get well—but they did! And when this happens we feel awe, not embarrassment at our failure in prognostication. Somehow I would like to get over to Mr. Z that humans are more complicated than he can possibly imagine.

I have seen primitive people from remote and undeveloped areas of the world who simply shrugged off what they could not understand, refusing even to look at an airplane or listen to a voice from a box. It is simpler. It requires no effort or involvement. One can sympathize with this very human inclination to stay with comforting certainties, with an understandable "never" and a dependable "always."

The good doctors I know do most certainly practice medicine of the whole person, but it is not as a result of study or of reading a book. It comes as naturally with the healing process as does breathing. Truth cannot conflict with truth. But we cannot demand full explanations for everything that we see. There is much in medicine that requires us to gaze in wonderment, storing away experiences that may eventually be useful to us or to our patients. So far we can scarcely explain all that happens on a cell membrane; certainly we cannot explain all that happens in a cell, or an organ, or an organism.

Medicine of the whole person? We are all for it, Mr. Z, but please don't shy away if it develops that your wife's depression is related to your intellectualizations and your emotional aloofness.

The author is an assistant editor of THE JOURNAL OF THE KENTUCKY MEDICAL ASSOCIATION, in which this editorial was published in July 1979. Reprinted with permission.

LETTERS

Agrees Medicine Is an Art; Rejects PSRO 'VoPo' Label

(The following letter, slightly edited to fit space limitations, was sent to Richard J. Noveroske, M.D., author of "PSRO VoPos," a guest editorial which appeared in last month's issue of THE JOURNAL.)

As a fellow radiologist and a participant in the local PSRO program, you certainly caught my attention (with your article).

Let me tell you at the start that I, too, have an abhorrence for federal intervention of any sort into my private and professional life, yet I believe it is naive for me to think my unwillingness to participate in a program of quality assurance and cost containment will serve any useful purpose. The federal government is already involved and it will definitely not become less involved.

I'm in complete accord with your description of medicine as an art, and cherish the preservation of this concept. You suggest in your article that the final decision as to whether or not a patient's care within a hospital will be terminated by the PSRO process is a completely mechanical application of statistics, rules and regulations. The very fact that a patient cannot be terminated without review by a physician advisor, who in most cases also represents a "free enterprise" practitioner with the same concerns to applying the "art" of medicine to his decision-making process, is a contradiction of your charge.

Even if your physician advisor makes an error on behalf of the patient in granting an extension to his hospital stay, his decision will stand, even if the local PSRO ultimately takes exception to the decision, presuming that your hospital retains its waiver of liability. There will be no retrospective denial of payment for the physician advisor's decision.

You implied in your article that the attending physician who admitted the patients who ultimately died after being discharged because of PSRO denial of payment, knew something that you and the other physician advisors did not know. I would like to submit some additional, if not more comprehensible explanations for why the patients were not granted extensions of their hospital stays:

- The attending physician may have failed to communicate the seriousness of the problem to the physician advisor, who was forced to act upon the information available from the attending physician and his assessment of the hospital record;
- The physician advisor may have failed to identify the legitimacy of the attending physician's concern. He is not mandated to apply a rigid set of standards, rules and statistics. He is asked to apply his medical judgment, based upon all available information in the hospital record and through his contact with the attending physician. Again, let me remind you that this decision will stand if your hospital's waiver of liability is intact;
- There may, in fact, have been no basis to conclude that acute care was necessary. Your argument that the patient's death is proof that hospitalization was justified is an extremely dangerous concept to promulgate, for it could equally apply to condemn every physician who has had the experience of a patient dying within a few days after

CONTINUED ON PAGE 746

'Without Ethics, There Is No Medical Profession'

I have never sent a bill to a colleague or one of his dependents over many years of practice.

Last January I had a cystoscopic procedure under I.V. pentathol anesthesia that took about half an hour. A few days later I received a bill for $126 from a person identified as an anesthesiologist. Since that person did not seem to honor professional courtesy, I now refer to her as an anesthetist.

Since then, I have noted considerable comment on the subject in medical journals, with a large preponderance of opinion favoring the long, time-honored procedure first postulated by Hippocrates.

Perhaps the latest poll on the subject appeared in the Impact section of the AMN in July.

It would thus appear that many of the younger members of our profession have accepted the socialistic brainwashing they have received from grade school through college.

This has been augmented by the planned steps into Medicare and Medicaid as precursors to the passage of N.H.I., which has been proven a failure in all countries where it has been tried.

As Dr. Martin Scheid of Houston said in the AMN of March 9, 1979, "Without ethics, there is no medical profession."

It would appear that our continuing medical education programs might very well improve the image of brainwashed doctors by teaching them the merits of free enterprise vs. socialism.

ARTHUR G. BLAZEY, M.D.
Santa Claus, Ind.

Letters will be published as space permits and at the discretion of the editor. They will be subject to editing. Reader response is encouraged. Letters should be addressed c/o THE JOURNAL of the Indiana State Medical Association, 3935 N. Meridian St., Indianapolis 46208.



Isn't it about time to return stability and profitability to your investments?

You can have both, you know. If you put the people in our Personal Trust Group to work for you. Professionals like Dick Stegemeier and Walter Gross. They believe in a partnership approach to money management. First, they work with you to determine your needs and goals. Then, they present an individualized program designed to increase the return on your investments and to minimize market volatility. And they maintain a follow-up dialogue with you to keep your program consistent with your needs and goals and with changing market conditions.

Dick and Walter back up their recommendations with the same expertise that has won our Asset Management Group nationwide recognition for consistent asset management performance.

All your life you've worked to build your net worth. Let professionals help make the most of it. Put Dick Stegemeier or Walter Gross to work for you. Give Dick a call at 639-8191. Or call Walter at 639-8190.

Personal asset management. It's another way we're proving we want to be your bank.



Dick Stegemeier



Walter Gross

Personal Trust Group

AMERICAN FLETCHER NATIONAL BANK AFNB

LETTERS

CONTINUED FROM PAGE 744

being sent home from the office, the emergency room, or from an extended hospital stay;

- The attending physician either failed to take exception to a wrongful decision of the physician advisor and initiate an appeal of that decision, or,
- The attending physician may have concurred with the physician advisor that acute care was, in fact, not necessary, in which case, you have missed a crucial consideration in your article which makes a condemnation of the review process totally unjustified for such reasons.

The implication that the only option to the patient and family is to leave the hospital is also misleading. The patient is free to remain in the hospital with his physician's consent if there is an understanding that either he, the family or the hospital is willing to absorb the cost.

I would also like to point out that it is not only the federal government that believes they have a right to demand quality assurance and cost containment if they are going to pick up the tab. The private sector also has shown increasing interest in participating in the same review process.

I am unwilling to label myself a "Vopo," as you seem so willing to label yourself. To do so is to admit a complete lack of understanding of the physician advisor role in dealing with PSRO problems in your hospital and for your local PSRO organization. Your hospital medical staff, your hospital administration, and, most of all, your patients need the care, concern and application of the concepts implied in the "art of medicine" which I see generously applied by physician advisors in many areas of the country.

Any physician who is unable or unwilling to serve as a physician advisor with an effort to making decisions using all his skills in both the art and science of medicine, or who perceives himself as a bureaucratic outsider or a "Vopo," as you describe, cannot possibly serve anyone's best interests, even the third party payers.

To retreat from a delegated status and to openly advocate "let the outsiders" in is an invitation to a scenario that could create all the problems that you verbalize without the opportunity for your attending physicians to have physician advisors whom they know and who know them sharing in the making of these crucial decisions.

Finally, let me suggest that you consider an on-site visit to some delegated hospitals where the PSRO review process is proceeding smoothly, and where the vast majority of the medical staff feel they, with their patients, are the ones who are best served, not the federal bureaucracy. To achieve this level of proficiency and to believe they are the ones in control, requires a genuine commitment to make this system work. Abdicating our role in the review process will indeed make the physician control of the review process a failure.

It will invite the bureaucracy to do what must be done and destroy, once and for all, any vestige of hope that we, the private practitioners of American medicine, can demonstrate our ability to assure quality assurance and cost containment without the indifference of a complete bureaucratic decision-making process.

G. W. EKLUND, M.D.
Roentgen Diagnosis, P.C.
Portland Adventist Hospital
Portland, Oregon 97216

McClain Car Leasing, Inc.

1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA

2 NEW ISMA sponsored insurance plans available to you

Two new essential insurance plans have been added to broaden the range of ISMA sponsored plans. An In-Hospital Protection Plan and a Medicare Supplement Plan brings the total number of supplemental insurance plans to six that are available to eligible member physicians and professional corporations.

NEW PLANS:

IN-HOSPITAL PROTECTION PLAN provides cash benefits of $20 thru $100 per day (when accidental injury or sickness causes hospital confinement). Benefits are payable directly to you, the insured member, and commence the very first day of covered hospitalization. Intensive care and convalescent home benefits included. Spouses and eligible dependent children may be included. Benefits reduce at age 65.

MEDICARE SUPPLEMENT PLAN provides "gap filler" benefits so essential today. Medicare revised their benefits effective January 1, 1979 and these ISMA sponsored plans have been revised to update these changes, supplementing both Medicare Part A and Part B.

OTHER INSURANCE PLANS AVAILABLE:

- **INCOME PROTECTION PLAN** provides an income of up to $2,000 monthly if you are disabled and unable to work due to a covered accident or illness.
- **EXCESS MAJOR MEDICAL PLAN** provides coverage after your present plan is exhausted. Up to $500,000 coverage with a $20,000 deductible. Unlimited surgical schedule and includes extended care and nursing home benefit.
- **OVERHEAD EXPENSE PLAN** provides needed dollars to help you pay off overhead expenses (employees' salaries, rent, utilities, property taxes, etc.) in the event of your covered disability. When disability strikes—your business overhead expenses keep right on going—even when you can't.
- **FAMILY INSURANCE PLAN** provides benefits up to $100,000 in the event of your death.

Underwritten by Continental Casualty Co. and Valley Forge Life Insurance Co., Chicago, Illinois

COUPON

For information on the ISMA sponsored plans including costs, terminations, exclusions, etc.

☐ In-Hospital Protection Plan
☐ Medicare Supplement Plans
☐ Income Protection Plan
☐ Excess Major Medical Plan
☐ Overhead Expense Plan
☐ Family Insurance Plan
☐ Professional Corporation

Administered by

Dr._____

Street_____

City_____ Zip_____

Mail to:
Indiana State Medical Association
3935 North Meridian Street
Indianapolis, Indiana 46208

j. russell townsend and associates



AUXILIARY REPORT

This month's Auxiliary Report was prepared by Anne (Mrs. Dwight W.) Schuster of Indianapolis, special assistant to the convention chairman.

Charlotte (Mrs. Abner P.) Bennett
President, ISMA Auxiliary

Though better poets than I could be found anytime,
It's with pleasure and excitement that I pen this rhyme.
'Tis the month of our state convention, and all calendars should be marked
For October 13th, that very special day when for Indianapolis we'll depart.
Now I give you this reminder, take your pen and checkbook in hand.
Send your reservations, for you won't want to miss all the pleasures we've planned.

Each one of you should have received a brochure and reservation form, for one was sent to each doctor's office as well as to his/her home. However, to freshen your memory, I'll mention some of the plans we have made to provide pleasure and relaxation to go with the stimulating scientific program that has been planned.

Monday—A special shopping tour has been planned with time to eat lunch at any of six new and interesting restaurants. Bus transportation will be provided. ($7 per person, lunch not included).

Monday evening—Make a date with your spouse or friend for wine, food, song and dance. The entertainment includes a dance program by members of the Indianapolis Ballet Society, as well as a tempting fur style show. ($20 per person).

Tuesday—While the doctors attend their meetings, the Auxiliary meeting will be held, followed by a delicious luncheon and a program, "Sounds of Music." The program will feature show tunes and semi-classical and classical music by members of the Indianapolis Opera Company. ($8.50 per person).

Tuesday evening—We'll all have a chance to enjoy President's Night with a gourmet meal and light entertainment by "The Arbors," a leading nightclub group. ($20 per person).

Add to the above activities many door prizes and lovely favors, and you'll have to admit this will be a convention you won't want to miss. These are bargain prices. Due to inflation and the high cost of food, it is necessary that we have advance reservations. If for any reason you did not receive a copy of the reservation brochure, contact the Indiana State Medical Association office at 1-800-382-1721.

We're looking forward to seeing you in Indianapolis Oct. 13-17 at the Sheraton West Hotel.

There's a Word for It

CELSIUS

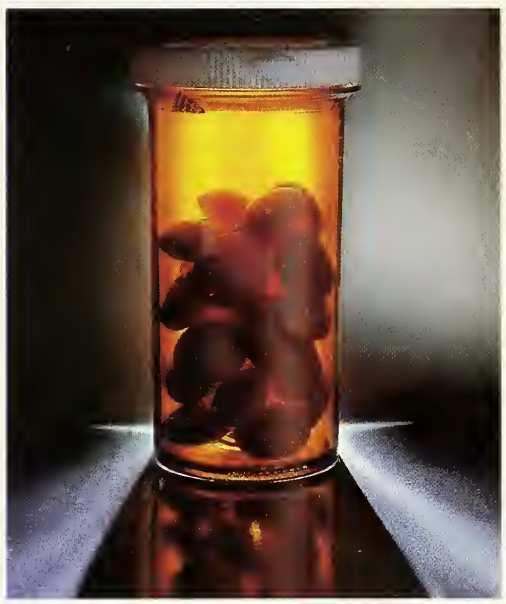
RICHARD J. NOVEROSKE, M.D.
Evansville

Degrees Celsius is the proper term for temperatures measured on the metric thermometer. Some persist in using the old term "centigrade." But "centigrade" when translated means "a hundred steps." We know that there are more than a hundred steps or degrees of temperature. We can go down about −273 degrees to absolute zero, and we can go up to a million or so degrees—the temperature of the sun and many stars. So "centigrade" implicitly isn't long enough of a span.

The use of metric temperature, Celsius, with normal body temperature at 37° is to be encouraged in medicine. Fahrenheit has normal body temperature so near 100° that it's often confusing. Remember the situation with the frightened mother who calls you over the telephone and says, "Doctor, my baby has a temperature of a hundred and four." You always wonder. "Does she mean 104.0 degrees or 100.4 degrees." It makes a difference. And if she says "a hundred and six" the ambiguity is even worse. No such problem with Celsius.

We physicians will benefit more than most people when we convert to metric temperature.

The Upjohn Company announces a new indication for Motrin® (ibuprofen)



A well-tolerated, nonnarcotic prescription for pain



© 1979 The Upjohn Company

Motrin now proved an effective analgesic for mild to moderate pain

Motrin 400 mg provided greater relief of pain than did propoxyphene 65 mg in controlled clinical pain studies.

Time after drug administration (hour)		.5	1	2	3	4
Mean relief-of-pain scores* (No. patients reporting)	Motrin 400 mg ibuprofen	.89 (108)	1.25 (108)	1.36 (108)	1.28 (107)	1.19 (106)
	Darvon 65 mg propoxyphene	.66 (100)	.99 (99)	1.13 (96)	.99 (96)	.80 (96)
Statistical significance		$p<0.02$	$p<0.01$	$p<0.05$	$p<0.02$	$p<0.002$

*0 = No relief 1 = Partial relief 2 = Complete relief

Data on file at The Upjohn Company

Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

Motrin 400 mg TABLETS
ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

Upjohn

Motrin® (ibuprofen) now proved an effective analgesic for mild to moderate pain

Motrin® Tablets (ibuprofen, Upjohn)

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINOICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin*: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.
Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

Caution: Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

MED B-4-S

Upjohn THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

J-7280-4

August, 1979

ALDORIL®
ALDORIL®
ALDORIL®
containing methyldopa and hydrochlorothiazide

TABLETS
ALDORIL®-25
containing 250 mg ALDOMET® (Methyldopa, MSD)
and 25 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL®-15
containing 250 mg ALDOMET® (Methyldopa, MSD)
and 15 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL® D30
containing 500 mg ALDOMET® (Methyldopa, MSD)
and 30 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL® D50
containing 500 mg ALDOMET® (Methyldopa, MSD)
and 50 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

Merck Sharp & Dohme, Division of
Merck & Co., Inc., West Point, PA 19486

MSD
MERCK SHARP & DOHME

Copyright © 1979 by Merck & Co., Inc

J9AR13

THE JOURNAL, in cooperation with the Division of Continuing Medical Education of the Indiana University School of Medicine, offers its readers a Continuing Medical Education program. This is the 21st in a series of CME articles produced by the faculty of the School of Medicine and is supported by a grant from its Division of Continuing Medical Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 793.



Small Airways Disease: The Bottom of the Iceberg

STEPHEN J. JAY, M.D.[1]
MEREDITH T. HULL, M.D.[2]
Indianapolis

[1]Chief of the Pulmonary Section, Wishard Memorial Hospital, and Associate Professor of Medicine, Indiana University School of Medicine, Indianapolis.
[2]Assistant Professor, Department of Clinical Pathology, Indiana University School of Medicine, Indianapolis.

Requests for reprints: Stephen J. Jay, M.D., Indiana University Medical Center, Regenstrief Building, 1001 W. 10th St., Indianapolis, Ind. 46202.

Acknowledgement: This work was supported by the Sunnyside Guild of Marion County, Indiana.

►►►

- ***Structural and functional characteristics of small airways***
- ***Lung tests that may reflect functional changes in small airways***
- ***Results of studies on the clinical importance of small airways dysfunction***

CHRONIC AIRFLOW OBSTRUCTION (CAO) is a major and growing health problem in this country. It is now recognized that the predominant diseases associated with airflow obstruction such as emphysema, chronic bronchitis and asthma may be present and progress for years before significant clinical signs and symptoms bring the patient to a physician. In this respect, CAO is similar to other common medical problems such as chronic hypertension, heart and renal disease, where, by the time patients develop symptoms, significant organ destruction may already be advanced.

The idea that clinically apparent obstructive lung disease represents only the "tip of the iceberg" of CAO has led to a search for early structural and functional changes in the lungs of asymptomatic patients. Attention has turned to examination of the small airways in the lungs.

The current interest in the role of small airways in CAO comes from several sources. Over the past 15 to 20 years, morphologic and physiologic studies have suggested that small airways may be the initial site of airflow obstruction. The recognition that routine lung tests may not detect dysfunction in small airways has led to interest in devising tests which are sensitive to abnormalities in peripheral airways. This interest was stimulated in the late 1960s and early 1970s with a growing national concern about preventive medicine and early disease detection.

At present, attention is focused on three basic questions: 1) Is disease or dysfunction in small airways the first step in the development of chronic airflow obstruction? 2) Are there physiologic "markers" of early small airways dysfunction? 3) Will treatment or modification of the environment alter the natural course of disease in small airways?

The purpose of this presentation is to review the structural and functional characteristics of small airways, to describe lung tests that may reflect functional changes in these airways and to present results of recent studies that address the clinical importance of small airways dysfunction. The potential relevance of these findings to the practicing physician will be emphasized.

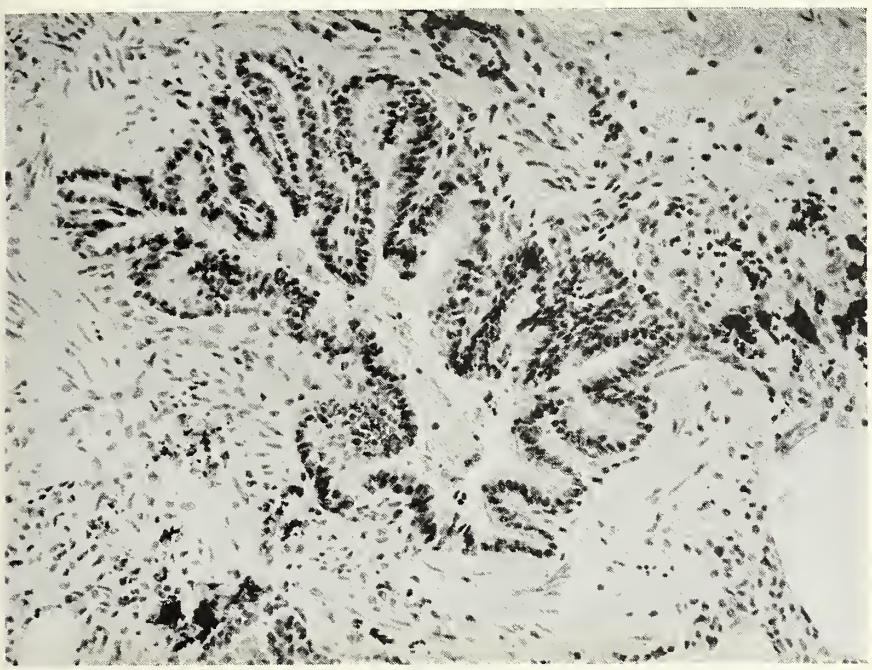
SMALL AIRWAYS DISEASE: ORIGIN OF THE CONCEPT

Early investigators interested in lung anatomy provided the groundwork for our understanding of the relationship between resistance to airflow and the cross-sectional area of the tracheobronchial tree. Weibel extended earlier observations and provided data suggesting that small airways (less than 2 to 3 mm in diameter) should contribute relatively little to the overall resistance to airflow in the lungs.[1] He demonstrated that the cross-sectional area of the lung at the level of 2 to 3 mm airways was large compared to the cross-sectional area of the trachea and proximal bronchi. He reasoned that even a small decrease in the caliber of the trachea would produce a large increase in resistance to airflow, whereas, a similar airway abnormality in the lung periphery would have virtually no measurable effect on airflow. This hypothesis was confirmed by Macklem and Mead, who showed that the majority of resistance to airflow in the lung is limited to airways of the first five to 10 divisions and that beyond the 10th division of airways in the lung, little resistance to airflow may be demonstrated.[2]

The importance of these observations to clinical medicine was made by Hogg, *et al,* who demonstrated that the predominant site of airways obstruction in patients with emphysema, chronic bronchitis and bronchiectasis was in airways less than 2 mm in diameter.[3] In the 10 years following this study, much effort has been devoted to elucidating the physiologic, clinical and prognostic significance of these observations.

In the normal lung there are approximately 23 generations of airways from trachea to alveoli. After approximately seven to nine generations (trachea = 0; main right or left bronchus = 1; right upper lobe bronchus = 2, etc.), the airway diameter has decreased to approximately 2 to 3 mm. There is no supporting cartilage at this level;

Figure 1
Photomicrograph showing mucous plugging and prominent infolding of the airway mucosa. Such changes decrease lumen volume and increase resistance to airflow. (Hematoxylin-Eosin stain, 100X)



thus, airway caliber may be influenced by a variety of factors including lung volume.

The most significant pathologic changes in the small airways are those that lead to increased resistance to airflow. The normal ciliated epithelium often is replaced by squamous metaplasia, which decreases mucous flow and contributes to mucous plugging. The bronchiolar mucosa develops a characteristic infolding pattern that further compromises the airway lumen *(Figure 1)*. Finally, a nonspecific population of chronic inflammatory cells frequently infiltrates the peribronchiolar connective tissue.

What controls movement of air in the peripheral regions of the lung?

The concept that the measurements of airway resistance (either directly in a body plethysmograph or indirectly with the forced expired volume in one second (FEV_1) reflect primarily large airway function is generally accepted. The concept suggests that routine lung tests (vital capacity, FEV_1) may be normal despite considerable functional or anatomic obstruction of small airways.

For example, if under normal conditions the resistance to movement of air in central airways (trachea and main bronchi) is 0.9 cm of water/liter/sec, and the resistance in peripheral airways is 0.1, the total pulmonary resistance under normal conditions would be 1.0 cm H_2O/L/sec. If you randomly occluded one half of all small airways, the resistance of peripheral airways would increase to 0.2 cm H_2O/L/sec; resistance of central airways would remain the same (0.9 cm H_2O/L/sec). Therefore, the total pulmonary resistance would be 1.1 cm H_2O/L/sec. This small increase in total pulmonary resistance due to occlusion of 50% of peripheral airways would likely not be detected using routine lung tests. Therefore, it is reasonable to assume that advanced and perhaps irreversible chronic airflow obstruction may develop before airway resistance increases to the extent that a patient develops respiratory symptoms or before tests such as the FEV_1 become abnormal.

An understanding of factors that govern airflow in the lung periphery is essential to an understanding of newer tests designed to assess small airways function. As air moves into and out of the lung, regional lung compliance and airways resistance determine the pattern of air movement. Lung compliance is a term that reflects lung elasticity or the volume change in the lung relative to the pressure required to produce this change. Airway resistance refers to a pressure differential down the airway related to the flow rate. The product compliance x resistance is called the "time constant," or the time after inspiration or expiration begins when airflow reaches a particular level. Alterations in regional lung time constants (usually an increase due to increase in resistance to airflow and/or an increase in lung compliance) affect the pattern of movement of air into and out of the lung.

At a very slow respiratory frequency, abnormalities in compliance and resistance have minimal effect on the distribution of air in the lung since there is adequate time for filling and emptying of alveoli even in diseased areas of lung. However, with rapid respiratory frequency, areas of lung with abnormal "time constants" may fill and empty slowly and/or out of phase with areas of the lung where

TABLE

Tests of Small Airway Obstruction

Frequency Dependence of Lung Compliance
Closing Volume or Capacity
Nitrogen Washout (Slope of Phase III)
Maximum Expiratory Flow-Volume Curve Breathing Air and Helium
Forced Mid-Expiratory Flow Rate ($FEF_{25-75\ \%}$)
Alveolar-arterial Oxygen Tension Gradient ($A\text{-}aO_2$)
Radioactive Aerosol Inhalation And Deposition

airways resistance and lung compliance are normal.

Another determinant of airflow in small airways is lung volume. Small airways lack cartilaginous walls. Therefore, their caliber is subject to fluctuations in intrathoracic pressure and changes in lung volume. It is known that these airways have increased caliber at high lung volumes and are narrower at small lung volumes. Other factors that may contribute to the effects of lung volume on airway caliber include surface tension forces and the intrinsic elastic properties of airways. Changes in one or more of these variables may cause small airway closure without the previously mentioned pathologic features. This fact may explain why some patients with no characteristic pathologic changes in small airways nevertheless have abnormal tests of small airways function.

A third factor that influences movement of air in small airways involves density dependence of flow. Simply stated, airflow in large airways is density dependent, that is, if one breathes a gas less dense than air (helium) the resulting decreased turbulence in flow will result in increased volume of inspiration. In small peripheral airways, where the flow rate is very slow because of the large cross-sectional area, flow remains laminar, even with air breathing. Helium breathing produces little, if any, increase in flow in these peripheral regions of the lung and is said to be density independent.

TESTS: SMALL AIRWAY OBSTRUCTION

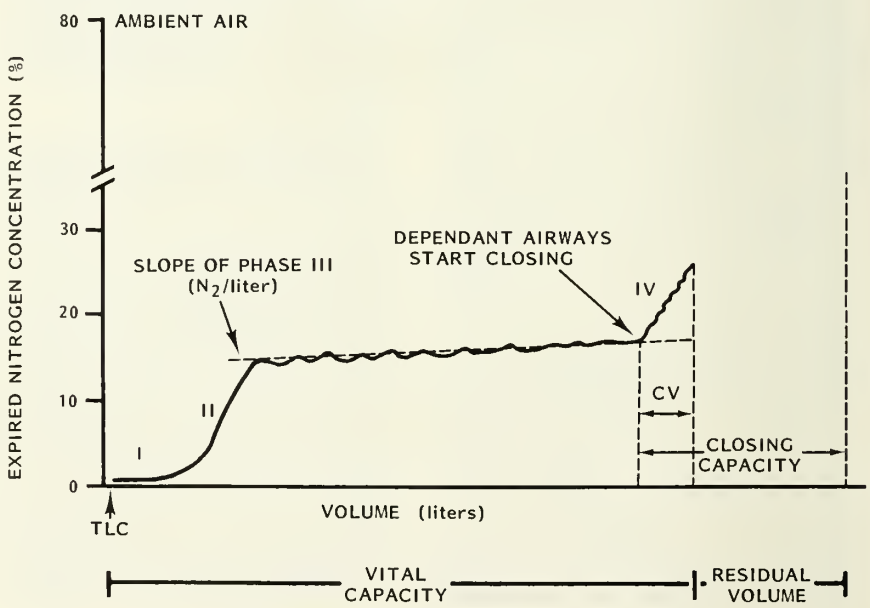
Several tests to detect dysfunction in small airways have been devised using the above physiologic principles *(Table)*.[4,5]

The test of "frequency dependence of compliance" has been used as a "gold standard" for examining the function of small airways. The test is difficult to perform and requires that a patient swallow an esophageal balloon for measurement of transpulmonary pressure. Therefore, clinical application is limited. The test is based upon the effects of rapid respiratory rate on the regional filling and emptying of lung units.

For example, if at a slow respiratory frequency, a two-compartment lung model received 500 ml of air in each compartment, or a total of 1,000 ml with a pressure change of 5 cm of water, the compliance would be 1,000 ml/5 cm H_2O or 200 ml/cm H_2O. If the airway leading to one lung compartment is narrowed by disease, there will be little effect of this abnormality on compliance at a slow respiratory

Figure 2

Continuous record of expired nitrogen concentration from a subject following inspiration of pure oxygen from residual volume to total lung capacity. Roman numerals indicate the four phases of this curve. In small airways disease, the slope of phase III increases, and the closing volume (CV) and closing capacity increase.



frequency. However, at a high respiratory frequency this lung compartment would be filled and emptied more slowly than the normal one and, therefore, the total volume exchanged would be reduced. For example, if the normal compartment received 500 ml and the compartment distal to the narrowed bronchus now received only 100 ml for a total of 600 ml divided by 5 cm H_2O pleural pressure change, the compliance would now be 120 ml/cm H_2O. The compliance would be "frequency dependent."

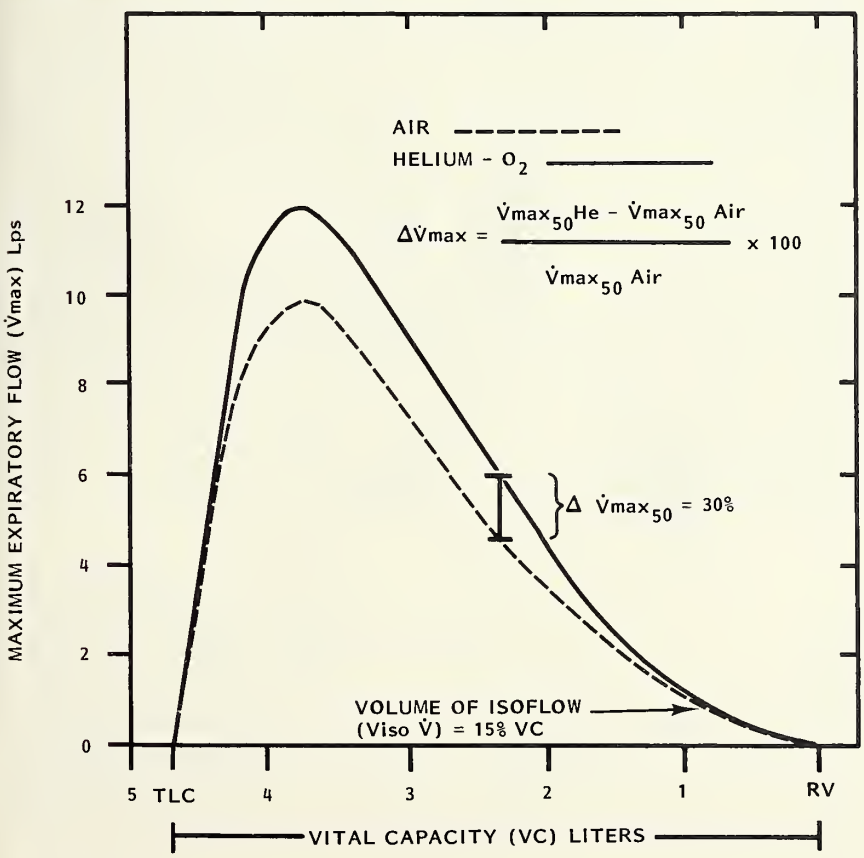
It should be noted that, as we discussed previously, the time constant represents the factors that govern regional lung emptying and filling. The above example utilized an increase in resistance in a segment of airway to produce the frequency dependence phenomenon. However, as noted earlier, changes in regional lung compliance might also affect the measurement and might result in frequency dependence of compliance without significant small airways disease. Early investigators recognized this and were careful to measure static volume-pressure curves of the lungs to eliminate this confounding factor. It was suggested that a normal static volume-pressure curve of the lung, i.e., normal lung compliance, with associated "frequency dependence of compliance," must be the result of increased resistance to airflow in small airways.

More recently, a test called "closing volume" has been developed *(Figure 2)*. This test is easier to perform, requires relatively little patient effort and may be used for screening purposes in epidemiologic surveys of large groups of subjects. The test is a modification of the nitrogen washout test described many years ago by Fowler as an index of the distribution of ventilation in the lung. The patient inhales 100% oxygen and, during slow exhalation, the concentration of nitrogen at the mouth is measured as a function of the volume exhaled. From an analysis of the curve relating nitrogen concentration and lung volume, the volume at which small airways are thought to close is calculated and expressed as a fraction of either vital capacity or total lung capacity, i.e., closing volume or closing capacity. The so-called "slope of phase III" or nitrogen washout test may be determined from the same tracing *(Figure 2)*. In the presence of small (and/or large) airways disease, the closing volume will be abnormally large and the nitrogen test will reflect relatively slow washout of nitrogen from the lung. If the FEV_1 is normal, abnormalities in these tests suggest dysfunction in small airways.

Two newer tests are based upon the principle of density dependence of airflow. The "maximum expiratory flow volume curve" is performed by having the patient maximally inhale and then exhale, performing a vital capacity maneuver

Figure 3

Normal maximum expiratory flow-volume curves measured with subject breathing air (dashed line) and an 80% helium, 20% oxygen mixture (solid line). $\Delta\dot{V}max50$ is the increase in flow with the subject breathing helium-oxygen compared to air at 50% of the vital capacity. The volume of isoflow ($Viso\dot{V}$) is the lung volume at which flow rates with subject breathing helium-oxygen and air are identical. With small airways obstruction the $\Delta\dot{V}max50$ decreases and the $Viso\dot{V}$ increases.



(Figure 3). Instead of recording volume against time as with conventional spirometry, one simply records flow rate at the mouth on the vertical axis of an x-y recorder and volume expired on the horizontal axis. The test is repeated while the patient breathes air and following a few breaths of a helium-oxygen mixture. Differences in flow rate (air vs helium) at 50% of vital capacity exhaled reflect small airways abnormalities.

The so-called "volume of isoflow test" has also been used as an index of small airways dysfunction. This volume is determined by superimposing the flow volume curves during air and helium breathing. Where the terminal portions of these curves cross represents the volume where flow with air and helium breathing is identical (and presumably laminar) and, therefore, independent of gas density. If peripheral airways are obstructed, a higher volume of isoflow, perhaps 25% of vital capacity, will result (normal is usually less than 15% of vital capacity).

Some authors have suggested that analysis of routine spirometric tracings may detect disease or dysfunction in small airways. This is important clinically since, with modest expense and expertise, a practicing physician can perform these tests in an office or clinic. The forced expiratory flow in the middle 50% of the vital capacity ($FEF_{25-75\%}$) is thought to represent the flow rate in small airways. This test is simple to perform, requiring only a force expiratory effort.

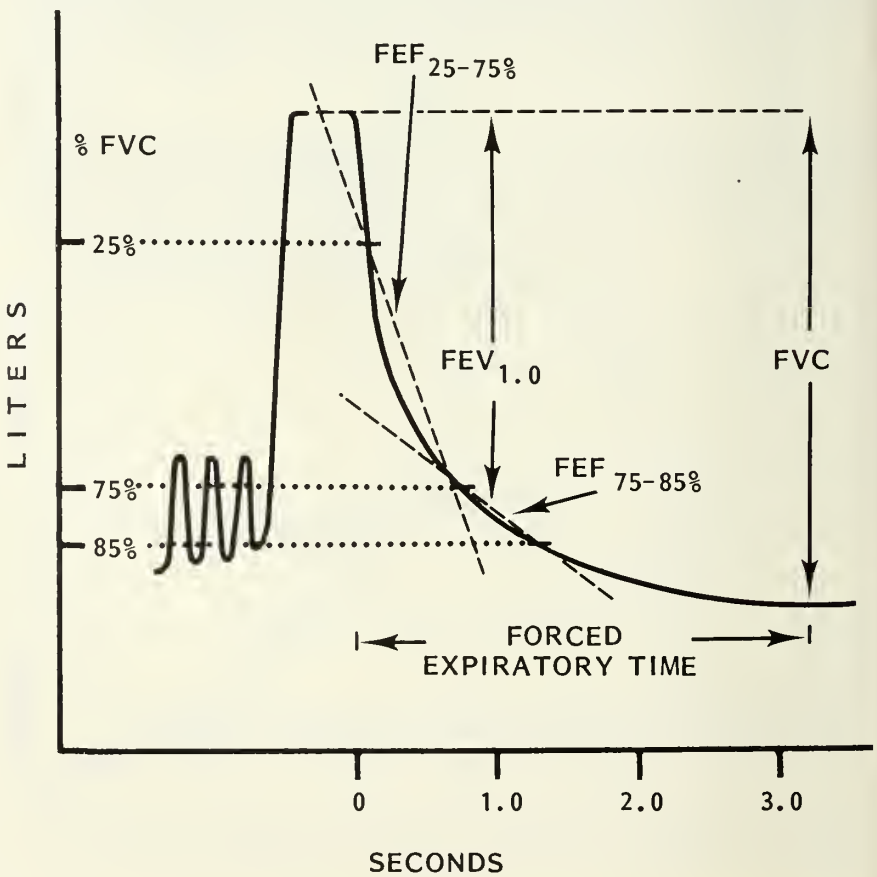
If the vital capacity and FEV_1 are normal, reduction of the $FEF_{25-75\%}$ correlates well with abnormalities in other tests of small airways. Since the variability of the $FEF_{25-75\%}$ is large, only when measured values are less than about 65% of predicated values can one be reasonably certain that small airways dysfunction exists.

More recently, Morris and coworkers[6] have examined the flow rate over a small segment of the terminal portion of the forced expirogram ($FEF_{75-85\%}$), reasoning that abnormalities here must represent dysfunction in the peripheral airways *(Figure 4).* The variability of this test is considerable and it has not gained widespread popularity.

The third measurement that may reflect disease in small airways and that may be obtained from a spirometry tracing is the "forced expiratory time." *(Figure 4).* This measurement was used years ago and simply reflects the total time required for an individual to exhale the vital capacity.[7] While some studies have shown good correlation between prolongation of forced expiratory time and abnormalities in other measurements of small airways function, the test is not routinely used.

Figure 4

Normal spirogram. The subject inspired maximally, then forcibly expired as much air as possible. With small airways obstruction the forced expiratory time is prolonged, and the forced expiratory flow in the middle 50% of the vital capacity ($FEF_{25-75\%}$) and the forced end expiratory flow ($FEF_{75-85\%}$) are reduced; the forced expired volume in one second (FEV_1), forced vital capacity (FVC) and the $FEV_{1.0}$ FVC % are normal.



It should be emphasized that interpretation of these tests of small airways function is dependent upon a normal vital capacity and forced expired volume in 1 sec. If these are normal and the above measurements are abnormal, small airways dysfunction is likely.

With disease in small airways it is reasonable to expect maldistribution of inspired air and mismatching of ventilation and blood perfusion with consequent increase in the alveolar to arterial oxygen tension gradient ($A\text{-}aO_2$). A systematic evaluation of the $A\text{-}aO_2$ gradients has not been made in patients with disease in the small airways and since the test requires an arterial puncture, it will probably not be useful for routine screening for small airways disease.

Abnormalities in the pattern of pulmonary deposition of radioactive aerosols might reflect small airways abnormalities. The distribution and elimination of inhaled radioactive aerosols has been compared with other tests of small airways function and a reasonable correlation exists.[8] In some patients, abnormalities in the radionuclide scans are found in the absence of abnormalities in standard tests of small airways function, suggesting that the former technique may be more sensitive in some patients for the early detection of small airways dysfunction. Further studies are needed to clarify the role of lung scans in the assessment of airways disease.

STRUCTURE-FUNCTION: CLINICAL CORRELATION

Only recently have pathophysiologic and clinical correlations been examined in patients with presumed small airways disease. Hogg and coworkers reported that, in patients who died of chronic airflow obstruction resulting from emphysema, chronic bronchitis, and bronchiectasis, the major site of air flow obstruction was in airways less than 2 mm in diameter.[3] Macklem and co-workers extended these observations in 1971 in a series of patients with chronic obstructive disease of small airways in whom major impairment in gas exchange and respiratory failure was demonstrated despite only minimal abnormalities in routine pulmonary function tests.[9]

Following these early observations, attention has been turned to asymptomatic or mildly symptomatic subjects in an attempt to identify those with subclinical small airways obstruction. Several groups of individuals have been examined:

Cigarette Smokers. Several investigators have demonstrated abnormalities in tests of small airways function in cigarette smokers, and cessation of smoking has resulted in resolution of these abnormalities in a significant fraction of patients.[10,12] These findings have led to speculation that smoke-induced pathologic and/or functional changes in small airways are potentially reversible. It is now well established that, using various tests of small airways function, one can separate a population of asymptomatic cigarette smokers from a matched non-smoking control population. The natural history of these abnormalities is unknown; however, it is thought that the small airways dysfunction represents the first step in the development of chronic airways disease.

Asymptomatic Asthma. The second group of subjects that have been studied in some detail have been asthmatics. In an early study concerning frequency dependence of compliance, Woolcock, *et al* demonstrated this abnormality in relatively asymptomatic asthmatics.[13,14] These findings have been extended and it is now recognized that asymptomatic asthmatics, including children and adults, frequently have abnormalities in tests of small airways function. Administration of an inhaled bronchodilator may reverse the abnormalities in some patients. The prognostic and therapeutic significance of these changes await clarification.

Viral Infections/Air Pollution. Two other groups of patients have been examined for changes of small airways dysfunction, including subjects recovering from viral respiratory tract infections and individuals exposed to ambient air pollution. In both populations, abnormalities in small airways may be frequently demonstrated, even in asymptomatic subjects. Recovery from viral respiratory tract infections and removal from a polluted environment result in partial or complete resolution of the abnormalities.[15]

Despite physiologic changes consistent with small airways dysfunction in these groups of patients, correlation of altered lung structure and function with clinical features of patients has been lacking. Recently, Casio, *et al* examined the lungs and, particularly, the small airways in a group of subjects in whom careful and detailed pulmonary physiologic testing immediately preceded thoracotomy and lung resectional surgery.[16] Pathologic changes in small airways were graded according to severity and correlated with lung function tests. Two tests seemed to correlate with pathologic evidence of small airway disease, the nitrogen washout test (slope of phase III) and the volume of isoflow. Cigarette smoking was clearly related to the abnormal findings. Thus, some of the physiologic tests designed recently to assess small airways function do seem to accurately reflect pathologic changes in small airways.

SUMMARY AND SUGGESTIONS FOR THE PRACTICING PHYSICIAN

It seems reasonable to conclude that in symptomatic patients with chronic airflow obstruction, the major site of obstruction is in airways of approximately 2 mm diameter. Significant disease in small airways may exist in asymptomatic patients with normal routine lung function tests. In some of these individuals a reversible component of small airways dysfunction may be demonstrated following smoking cessation, administration of bronchodilators, removal from ambient air pollution and resolution of viral respiratory tract infections. If the only abnormality observed in a patient of age 40 or over is small airways dysfunction, it is very unlikely that this problem will significantly affect the patients health or longevity.[17]

Is disease in small airways the first step to chronic airflow obstruction? Based on current information, the answer is probably yes. If a patient is a young smoker (less than 40 years) and has evidence of small airways abnormality, you should use this evidence to indicate to the patient that he is clearly at increased risk for developing symptomatic lung disease. Evidence indicates that, if he stops smoking, the rate of deterioration in lung function will normalize.

Are there "markers" of early small airways dysfunction? The tests described above seem to reflect dysfunction in small airways; however, variability in some tests and the lack of correlation among various tests in some patients, indicate that additional information is required before the sensitivity and or specificity of these tests is established. Until questions regarding the newer tests of small airways function are answered, we feel that the practicing physician should rely on routine spirometry, an excellent and simple test.

Will treatment alter the natural course of disease in small airways? This important question remains unanswered. For example, we do not know whether the asymptomatic asthmatic with mild airflow obstruction should be routinely treated. We do not treat these patients unless there is a history of recurrent asthmatic attacks.

From a practical standpoint, it is important that clinicians understand the concept of small airways disease or dysfunction. However, until more basic information concerning the significance of these changes is obtained, routine screening tests or mass screening programs for small airway dysfunction are not recommended.[18] In patients with unexplained respiratory symptoms in whom routine tests of lung dysfunction are normal (FVC and FEV_1), tests of small airways function may enable the clinician to elucidate the mechanism of respiratory signs and symptoms. Abnormalities in these tests in tobacco smokers may provide an important incentive for these persons to discontinue smoking.

REFERENCES

1. Weibel ER: Morphometry of the Human Lung, Academic Press Inc., Springer-Verlag, 1963.
2. Macklem PT, Mead J: Resistance of central peripheral airways measured by a retrograde catheter. *J Appl Physiol,* 22:395, 1967.
3. Hogg, JC, Macklem PT, Thurlbeck WM: Site and nature of airway obstruction in chronic obstructive lung disease. *N Eng J Med,* 278:1355, 1968.
4. Macklem PT: Disease in small airways. *Basics of RD,* American Thoracic Society, Vol. 4, No. 5, May 1976.
5. Macklem PT: Current concepts, new tests to assess lung function. *N Eng J Med,* 293:339, 1975.
6. Morris JF, Koski A, Breese JD: Normal values and evaluation of forced end-expiratory flow. *Am Rev Respir Dis,* 111:755, 1975.
7. Cochrane GM, Benatar SR, Davis J, Collins JV, Clark TJH: Correlation between tests of small airway function. *Thorax,* 29:172, 1974.
8. Taplin GV, Tashkin DP, Chopra SK, Anselmi OE, Elam D, Calvarese B, Coulson A, Detels R, Rokaw SN: Early detection of chronic obstructive pulmonary disease using radionuclide lung—Imaging procedures. *Chest,* 71:567, 1977.
9. Macklem PT, Thurlbeck WM, Fraser AG: Chronic obstructive disease of small airways. *Ann Intern Med,* 74: 167, 1971.
10. Niewoehner DE, Kleinerman J, Rice DB: Pathologic changes in the peripheral airways of young cigarette smokers. *N Engl J Med,* 291:755, 1974.
11. Bode FR, Dosman J, Martin RR, Macklem PT: Reversibility of pulmonary function abnormality in smokers. *Am J Med,* 59:43, 1975.
12. McCarthy DS, Craig DB, Cherniack RM: Effect of modification of the smoking habit on lung function, *Am Rev Respir Dis,* 114:103, 1976.
13. Woolcock AJ, Vincent NJ, Macklem PT: Frequency dependence of compliance as a test for obstruction in the small airways. *J Clin Invest,* 48: 1097, 1969.
14. McCarthy D, Milic-Emili J: Closing volume in asymptomatic asthma. *Am Rev Respir Dis,* 107:559, 1973.
15. Blair HT, Greenberg SB, Stevens PM, Bilunos PA, Couch RB: Effects of rhinovirus infection on pulmonary function of healthy human volunteers. *Am Rev Respir Dis,* 114:95, 1976.
16. Cosio M, Ghezzo H, Hogg JC, Corbin R, Loveland M, Dosman J, Macklem PT: The relations between structural charges in small airways and pulmonary—function tests. *N Engl J Med,* 298:1277, 1978.
17. Solomon DA: Are small airways tests helpful in the detection of early airflow obstruction? (Editorial), *Chest,* 74:567, 1978.
18. Macklem PT, Becklake MR: Is screening for chronic limitation of airflow desirable? (Editorial), *Chest,* 74:607, 1978.

Stop envying your friends in New York, Chicago or Miami. Tarkington Tower high-rise homes are here.

The lifestyle you've envied in New York, Chicago and Miami can now be yours at Tarkington, the high-rise condominium that brings a sophisticated, cosmopolitan way of life to Indianapolis. The security and freedom will enable you to relax and enjoy. The amenities and appointments will exceed your expectations. No matter which Tarkington residence you purchase, it's more than a home; it's an attitude. Tarkington exudes an aura of elegance that subtly says, "You've earned it. Now enjoy it."

Come, get your view of the good life and sample the leisurely, luxurious lifestyle our 96 enviable owners will enjoy. Perhaps you should be one of them.

Call 925-1165 to make an appointment for your private showing. Call now, because there is only one Tarkington Tower.

Tarkington Tower

Luxury High-Rise Homes

MERIDIAN AT FORTIETH

Close to the mainstream of Indianapolis, yet far above.









R. JOE NOBLE, M.D.
DONALD A. ROTHBAUM, M.D.
C. C. HALLAM, M.D.
J. S. HILLIS, M.D.
St. Vincent Hospital & Health Care Center
Indianapolis

THE FIVE FINGERS OF CARDIOLOGY

The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac-diagnosis.

Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.

A 35-year-old man presents to the emergency room, obviously extremely ill with dyspnea and weakness. He has experienced moderately severe anterior chest pain for more than a day.

The systolic blood pressure is only 80mmHg; the neck veins are markedly distended.

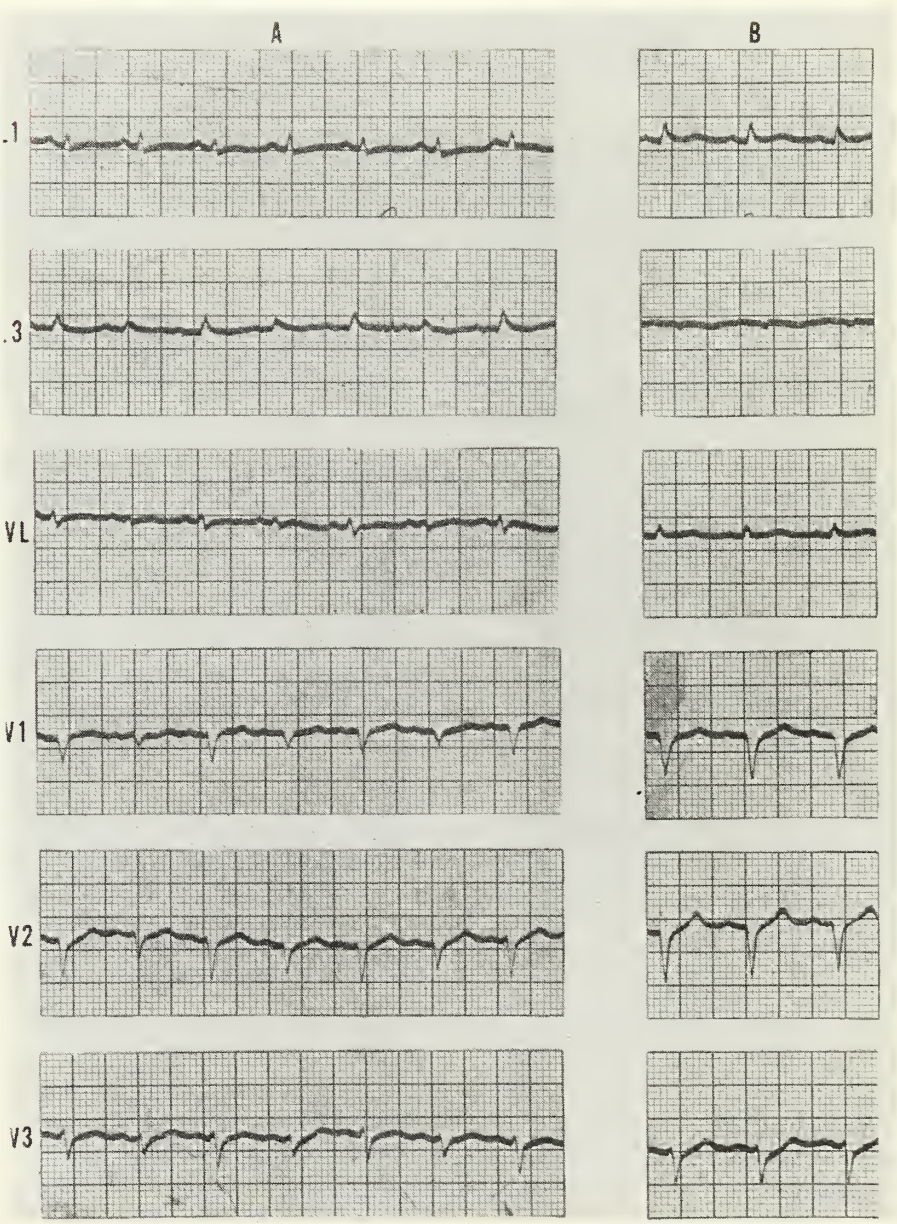
Two months earlier, a melanoma was excised from the patient's back; histologic examination confirmed that it was malignant.

QUESTIONS: Interpret Electrocardiogram A, recorded acutely. Does the ECG aid your diagnosis of the cause of hypotension and venous hypertension? Compare A with B. What therapy was provided between the recording of the two tracings?

A Self-Assessment

ANSWER: ECG A demonstrates low voltage, and electrical alternans, most apparent in leads V_1 and V_3. This combination of findings is consistent with pericardial effusion resulting in hemodynamic pericardial tamponade. Of course, the systemic hypotension and the venous hypertension are explicable on this basis also. When electrical alternans is recorded electrocardiographically, the effusion is usually relatively large, fairly acute and hemorrhagic. Malignant melanoma is among the tumors which most frequently metastasize to the heart and pericardium.

The patient suffered from pericardial tamponade due to the hemorrhagic pericardial effusion resulting from the implanation on the pericardium of the malignant melanoma. Pericardicentesis was performed, which immedately relieved the patient's symptoms and hemodynamic compromise. ECG **B** was recorded after pericardicentesis, and demonstrates a restoration of normal voltage, and resolution of the electrical alternans.



Continuing Medical Education

Secondary Somatic Problems: Recognition and Treatment

Part 1:

Psychosomatic and Primary Depression Disorders

DAVID F. WEHLAGE, M.D.
South Bend

Introduction

Secondary somatic problems refer to the large group of physical complaints that are partially or totally emotional in nature and etiology. In spite of the fact that physicians are asked to consider the "whole man" (physical ailments cause emotional problems and vice versa), it is obvious all physicians still try to categorize what is the primary source of the complaint—the soma or the psyche. This paper helps delineate the various patterns of psychological difficulties that are seen by physicians because of complaints of physical discomfort or disease.

Classification and Differential Diagnosis: There are two groups of secondary somatic problems. The first group is characterized by people who respond to and complain about *physical sensations* activated by long standing emotional arousal. These people transform the emotional arousal into physiological changes. This group includes the Psychosomatic (psychophysiological) Disorders and the Primary Depression Disorders.

The second group is characterized by people who respond to *emotional sensations* but complain about them by communicating or translating the emotional sensations into physical terms or language. Therefore, the description of the physical complaints is very "subjective." This group includes Hypochondriasis, Hysterical-dependence Disorder, Obsessional Disorder, Malingering, and the Acute Situational Disturbance. Each one of the subtypes of the two groups can be differentiated by considering the following outline:

- Nature of complaints
- Patients' attitude toward their complaints
- Physician's emotional reactions, precipitated by patients, that should be anticipated and handled by the physician
- Kind of workup indicated
- Treatment
- Response to treatment

PSYCHOSOMATIC DISORDER

Nature of complaints: Patients have complaints commensurate or compatible with diagnosable physiological disease. Complaints and

The author, an Associate Clinical Professor of Psychiatry, Indiana University School of Medicine, South Bend, Ind., is a Fellow of the American Psychiatric Association and a Diplomate of the American Board of Psychiatry and Neurology.

This is the first of a three-part series on Secondary Somatic Problems. Part 2 will deal with Hypochondriasis and Hysterical Dependence Disorder; Part 3 will deal with Obsessional Disorder, Malingering and Acute Situational Disturbance. Each part offers review questions which, upon successful completion, have been approved for one Category 1 credit hour toward the AMA's Physician Recognition Award. The quiz appears on Page 781.

Publication supported in part by a grant from the Indiana Medical Foundation, Inc.

symptoms are usually limited to one system: GI, musculoskeletal, etc. The complaints and physiological problems represent overactivity of physiological functions (spasm, hypersecretion, etc.) reflective of "chronic tension state." The complaints are *not* related in a sequential way to any social-situational problem.

Patients' attitudes toward their complaints: They are *concerned* about their complaints. They have a somewhat personalized but nontheatrical way of describing pain and tenderness: "I feel like a spear had rammed my stomach." These patients will have some ideas and impressions about what makes them worse and better. They usually have some self-diagnosed explanation for their complaints, indicating some personal involvement with relieving their complaints. They maintain a hope for recovery and cure.

Physician's emotional reactions precipitated by patients that should be anticipated and handled by the physician: Because these patients usually have so many questions, the physician feels defensive and threatened—"What is the medicine supposed to do?" Patients may ask for second opinions, which makes the physician defensive. The physician can alienate these patients by being nonchalant about complaints because of the lack of seriousness and lack of drama in the presentation of their complaints. These patients' denial of emotional factors and causality may make the physician angry; he should avoid responding in the foregoing ways.

Kind of workup indicated: Routine medical workup for the involved system is indicated. Introduce early in workup probable emotional substrate and its aggravation of complaints.

Treatment: a. Symptomatic and definitive treatment as indicated for physiological abnormalities. Give patients a role in deciding what medication helps the most and how to use it.

b. Explain the physiology of tension-spasm-pain complex.

c. Give self-help regimen, exercise, diet, etc. Give advice about hygienic, tension-free life.

d. Educate patients to psychiatric factors by helping them recognize that anger, guilt, shame, etc., cause tension.

e. If patients are verbal and able to accept the existence of feelings and emotions, refer to a psychiatrist: "I would like you to see someone who knows more than I do about emotions and how they cause problems." These patients often just need the permission of their physician to go to a psychiatrist.

f. The attitude of the physician should be one of *passive friendliness*, which involves not being too friendly or too outgoing. One should maintain a professional, evaluative posture, saying to patients, "In my professional opinion, you should consider . . ." These patients do not want a friend for a physician. Never become flippant or jokingly superficial. Psychosomatic complaints usually have to do with subtle tensions in relationships with loved ones. The complaints are not the result of a job, finances, etc., even though that is what patients will bring up.

Response to treatment: There is a variable response to the treatment outlined from an attitude of being reassured and able to live with complaints to one of being angry about the lack of total relief and about the inadequacy of definitive answers. A significant group of patients will refuse psychiatric referral initially; but if the physician is kind yet firm in repeating his recommendation, they often will go voluntarily as complaints persist. Psychiatric treatment does improve physiological symptoms but does not remove them. Patients come to accept and understand the nature of a periodic relapse that requires them to see their therapist and does not require repeated or extensive medical treatment.

PRIMARY DEPRESSION DISORDER

Nature of complaints: Patients usually have non-anatomic *pain* complaints. There is an increased pain sensitivity and pain awareness in all parts of the body. Each patient will have a stable constellation revolving around the issues of *pain* and *fatigue*.

Patients' attitude toward their complaints: These patients are perplexed and concerned about feeling "something is wrong." They are exasperated and may express their depression at not recovering. They all will express a quality of endurance and tolerance of their complaints in trying to learn to live with them.

Physician's emotional reactions precipitated by patients that should be anticipated and handled by the physician: The physician will usually feel helpless since nothing seems to help even though the patients are dedicated, cooperative and sincere. The vagueness of the pain and fatigue makes a medical diagnosis elusive, which leads to rejection of the patient by referral to a physician other than a psychiatrist.

Kind of workup indicated: Minimal and rapid workup. If nothing abnormal, do not search for rare pain or fatigue diseases. Most important part of workup is making diagnosis of depression.

Treatment: a. Refer to a psychiatrist or begin antidepressant medication.

b. Do not treat physical pain symptoms with addicting or habituating medication. These medications will likely *aggravate* depression.

c. Maintain a hopeful attitude for recovery in your treatment or referral to a psychiatrist.

Response to treatment: Pain and fatigue complaints will resolve as depression is resolved.

BIBLIOGRAPHY

1. Perley MJ, Guze, SB: Hysteria: The stability and usefulness of clinical criteria. *N Engl J Med,* 266:421-426, 1962.
2. Forrer GR: Hallucinated pain syndrome. *Headache,* 8:71-75, 1968.
3. Spiro, H: Chronic factitious illness. *Arch Gen Psychiatry,* 18:569-579, May 1968.
4. Fras I, Coughlin B: The treatment of factitial disease. *Psychosomatics,* 12:117-122, March 1971.
5. Kaplan H, *et al:* Post gastrectomy pain and schizophrenia. *Psychosomatics,* 11:157-162, May 1970.
6. Cramer B: Munchausen Syndrome. *Arch Gen Psychiatry,* 24:573-578, June 1971.
7. Hackett T: Managing the patient in chronic pain. *Hospital Physician,* 79-93, May 1967.
8. Engel G, Schmale A: Psychoanalytic theory of somatic disorders. *J Am Psychoanal Assoc,* 15:344-365, April 1967.
9. Ludwig A: Hysteria. *Arch Gen Psychiatry,* 27:771-777, December 1972.
10. McCranie EJ: Hypochondrical neurosis. *Psychosomatics,* 20:11-15, January 1979.
11. Strain JJ, Grossman S: *Psychological Care of the Medically Ill,* Appleton-Century-Croft, New York, 1975.
12. Altman N: Helping the hypochondriac. *AFP,* 17:107-112, June 1978.
13. Lipowski ZJ: Psychosomatic medicine in the Seventies. *Am J Psychiatry,* 134:233-244, March 1977.
14. Lipowski ZJ, ed: *Psychosomatic Medicine: Current Trends and Clinical Applications,* Oxford University Press, New York, 1977.
15. Rahe R: Epidemiological studies of life change and illness. *Int J Psychoanal,* 6:133-146, 1975.
16. Mirsky IA: Physiologic, psychologic and social determinates in the etiology of peptic ulcer. *Am J Dig Dis,* 3:285-313, 1958.
17. Dodge D: *Social Stress and Chronic Illness,* University of Notre Dame Press, Notre Dame, Ind., 1970.
18. Salzman L: Psychotherapy of the obsessional. *Am J Psychother,* 23:32-40, January 1979.

★

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

Since 1899

THE

MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
Suite 624, 6100 North Keystone Avenue Telephone: (317) 255-6525
Mailing Address: P.O. Box 20132, Indionopolis 46220
Northern Indiono Office: Douglos O. Sellon, Representative
120 LoSolle West Bldg., Suite 304
South Bend, In. 46601 Telephone: (219) 289-7332

GUIDELINES: Filter Paper T_4 and TSH Screening Tests

IRA K. BRANDT, M.D.
EDWIN L. GRESHAM, M.D.
TIJEN O. OEI, M.D.
JAMES C. WRIGHT, M.D.
Indianapolis

With the requirement as of July 1, 1979 that all babies born in Indiana be tested for hypothyroidism, the authors have prepared these guidelines for use by physicians at Indiana University Hospitals and others who are involved in the same type of program.

FILTER PAPER T_4 and TSH (thyroid-stimulating hormone) tests are designed to be used as a method of screening **term** newborn infants for hypothyroidism. The blood samples **must** be obtained at **3-5 days of age.** (Filter paper values for T_4 and TSH are **not** the same as those obtained from **serum** samples.)

Since infants more than 5 days of age and premature babies (especially those recovering from HMD) normally have lower T_4 values, they should not be included in the same statistical group as term infants who are 3-5 days old. If a sufficient number of normally lower values were included in the screening group, they would reduce the overall mean test values so that some 3- to 5-day-old term infants with hypothyroidism could be missed. For these reasons, the mean and standard deviations discussed below are derived from term infants 3 to 5 days old.

Since premature infants have blood sampled for PKU testing at 6 to 14 days, or as soon as their condition is stabilized, the same filter paper may be used for hypothyroidism testing with the understanding that there will be a higher incidence of false positive tests but no increase in the number of false negative tests.

COLLECTION

All term infants **between 3 and 5 days of age** should have capillary blood obtained from the same filter paper sample that is used for PKU (phenylketonuria) testing. Premature infants may have this done at a later age. The following precautions should be taken in the collection in order for the results to be reliable:

- Do **not** touch the collection area of the filter paper with your fingers.
- Do **not** touch the filter paper to the baby's heel during collection.
- Blood should be collected on **one side** of the paper only from a "hanging drop" of capillary blood.
- The complete circle must be filled with blood and permitted to soak through to the backside.
- Do **not** add blood to the backside of the filter paper.

For assistance with problems concerning the collection of specimens, please contact Dr. T. Oei (317-264-3844) or Kim Jones (317-264-3856), Thyroid-Screening Laboratory supervisor, Dept. of Clinical Pathology, Indiana University Hospitals.

INTERPRETATION

A **low** filter paper T_4 at the Indiana University Hospitals is determined by whichever of the following criteria gives the higher value:

1. The individual infant's filter paper T_4 value is considered low when it is at least two standard deviations **below** the mean value for the daily run; or
2. The individual infant's filter paper T_4 is considered low if it is equal to or less than 4.9 μg/dl. (This value is two standard deviations below the mean filter paper T_4 value for over 2,500 term infants, 3 to 5 days of age, born at Indiana University Hospital.)

When a low filter paper T_4 value, as defined above, is obtained, a filter-paper TSH assay will be performed on the third blood spot on the same paper to determine if there is a need for further evaluation. Recommendations for subsequent action are:

1. If the filter paper TSH is greater than 25 μU/ml, the patient must be recalled immediately for evaluation of the presumptive diagnosis of primary hypothyroidism. The confirmation of this diagnosis requires **serum** T_4 and TSH determinations.
2. If the filter paper TSH is less than 25 μU/ml, and if the filter paper T_4 is between 2.0 and 2.5 standard deviations below the mean for the daily run **or** between 4.9 and 3.1 μg/dl, the patient is considered to be normal and no recall is required.
3. If the filter paper TSH is less than 25 μU/ml and if the T_4 is more than 2.5 standard deviations below the mean for the daily run **or** less than 3.1 μg/dl, the patient should be recalled immediately for **serum** T_4, TSH and T_3 resin uptake (or equivalent) determinations.

(An infant in the latter group could have hypopituitarism with secondary hypothyroidism, thyroid binding globulin deficiency, or the values obtained on screening could be spuriously low.)

It is important to reemphasize that filter paper T_4 and TSH determinations are to be used as a method of **screening** for neonatal hypothyroidism and have been standardized for term infants who are 3 to 5 days of age. The diagnosis **must** be confirmed by serum determinations so that replacement therapy can be initiated, when indicated, with a minimum delay. Premature infants may be screened at the same age or at the time of PKU testing with the understanding that there will be more false positives but no increase in false negatives.

For assistance in evaluating abnormal thyroid function, please call Dr. James Wright, Pediatric Endocrinology (317) 264-3973, Dr. Ira Brandt, Pediatric Metabolic Diseases (317) 264-3966, or the Riley Neonatologist on call via the Perinatal hotline (317) 264-4700.

From the Dept. of Pediatrics, James Whitcomb Riley Hospital for Children, Indiana University School of Medicine, Indianapolis.

Pathophysiology of Peptic Ulcer Disease

Prevailing Concepts of Ulcer Diathesis

JAMES Y. McCULLOUGH, Sr.,
M.D., M.Sc.
New Albany, Ind.

SYNOPSIS ABSTRACT

Clinical and experimental research over the past 40 years has changed the concept of peptic ulcer disease and established firm scientific pathophysiologic reason to account for its occurrence.

From the postulation that peptic ulcer was a direct result of decreased local resistance of the mucosa, there emerged an understanding of the vagal and gastrin effect upon the fundic parietal cell function. Abnormal vagal or gastrin stimulation creates an unfavorable internal environment characterized by hypersecretion and hyperchlorhydria conducive to the development of duodenal ulcer.

The pathophysiology involves injury to the mucosal barrier either endogenous as with change of pH or by exogenous agents. Increased permeability of the mucous membrane and back diffusion of hydrogen ion favors the development of peptic ulcer. Carried further, in the presence of hypotension and sepsis, the added factor of poor vascular perfusion evolves into ischemia of the gastric mucous membrane and provokes stress ulceration.

The author is a volunteer faculty member of the Dept. of Surgery, University of Louisville. He is a member of the American College of Surgery and is certified by the American Board of Surgery.

BEGINNING IN 1935 Dragstedt[1] developed animal experiments and clinical studies from which evolved a new concept of the pathophysiology of duodenal ulcer.

His studies indicated and he proposed that duodenal ulcer was directly related to hypersecretion of gastric juice rather than decreased local resistance of the mucosa. Dragstedt[2] discovered that pure gastric juice as secreted by the parietal cells in the fundus will digest living tissue including stomach, duodenum and jejunum.

This he demonstrated in dogs in accessory fundal pouches and in the isolated stomach exposed to pure fundic secretion, vagus nerves intact. Under such conditions dogs regularly developed ulcers; however, living tissue with blood supply intact, such as spleen, kidney, intestine and pancreas, was not digested when implanted into the gastric wall of dogs exposed to the normal digestive action of gastric secretion.

Under the latter conditions, materials such as mucous, saliva, food and regurgitated duodenal secretions buffered, neutralized and mechanically diluted the gastric juice.

In the healthy person the secretory function is augmented by the sight, smell and taste of food, a response mediated by the vagus nerve. The longest period of fasting is at night when there is a relative absence of these stimulating factors, but in the ulcer patient the activity of the vagus continues unabated.

This ulcer diathesis so compatible with the development of duodenal ulcer is manifest in the production of hydrochloric acid by the parietal cells and discovered in the milliequivalents of hydrochloric acid in the 12-hour nocturnal secretion.

Subsequent to the ingestion of food, there is a release of gastrin from the antral mucosa as postulated by Edkins[3,4] in 1906 and isolated by Gregory[5] in 1962.

The matter of vagal stimuli producing gastrin release remains controversial. Schofield[6] believed that the antrum does secrete in response to vagal stimulation and that it is not manifest in the fasting animal because of high concentration of fundic acid acting in an inhibitory capacity. Other investigators have found that if fundic acid is delivered from the antrum, as in a Heidenheim pouch, the response can be elicited by administration of insulin. This indicates vagal-activated response in the antrum, with release of gastrin and increased secretion of acid in the denervated fundic pouch.

Woodward's studies[7] indicated that insulin-induced hypermotility in the isolated antrum activated release of gastrin.

Grossman[8] demonstrated that distension of the fundus initiated release of gastrin by vagal reflex and cholinergic effect. He indicated that the cephalic phase is a combination of direct vagal stimulation of fundic glands and vagal release of gastrin from the pyloric glands.

Dragstedt[9] produced ulcers of the stomach, duodenum or jejunum in animals by transplanting the antrum into the colon as a diverticulum. The transplanted antrum continued to provoke gastric secretion because the colon content failed to become acid in reaction and the antrum was deprived of any inhibitory effect. This indicates that hydrogen ion concentration of the antral contents stimulates secretion of gastrin.

Woodward[10] found that as the pH in the antrum falls to three or below, further production of gastric juice is blocked. He attributes this to inhibition of the secretion of gastrin accompanying increase in hydrogen ion concentration in the duodenum.

The loss of this built-in cutoff mechanism, as it ordinarily occurs when the pH falls in the normally placed antrum, may also account for the profound ulcerogenic effect of the Finsterer-Devine exclusion operation. In this procedure the alkaline duodenal contents continue to be regurgitated into the excluded antrum.

Increased acidity in the duodenum also inhibits the intestinal phase of gastric secretion mediated by the release of pancreatic secretin and biliary secretions, cholecystokinin-pancreozymin.

Greenlee[11] and Thompson[12] showed that a relatively pure preparation of pancreatic secretin injected intravenously produced marked outpouring of pancreatic juice, with decrease of gastric secretion probably due to inhibition of gastrin release.

Vagotomy in the duodenal ulcer patient eliminates the cephalic phase of excessive gastric secretion. The atonic effect of vagus section upon the stomach also reduces the response of the parietal cells to humoral (gastrin) stimulation. Lowered basal secretion and stasis may also be factors in gastric ulcer.

Gastric ulcer usually occurs at the incisura. Gastric ulcer following recurrent duodenal ulcer and gradual scarring and increasing obstruction is accompanied by hyperchlorhydria. Gastric ulcer found in the atonic post-vagotomy stomach with or without obstruction is likely to be found in the presence of hypochlorhydria.

In 1939 Teorell[13] proposed his theory of increased permeability of the stomach mucosa to acid and its effect of back diffusion of hydrogen ion.

Davenport[14] later brought forth his concept of the gastric mucosal barrier. Back diffusion of hydrogen ion occurs where the mucosal barrier is injured, and it is here that gastric ulcer often develops.

Injury to the mucosal barrier may be endogenous, as in abnormal hypersecretion of acid and fall in pH. Injury may be caused by disturbance of the antral-pyloral pump. Fisher and Cohen[15] have shown the pyloric mechanism abnormality to be a low pressure response to acid in the duodenum, allowing reflux of duodenal contents into the stomach. Bile-induced alkaline reflux gastritis occurs. The mucosal barrier effect is altered, and increased permeability with back diffusion of hydrogen ion occurs. Exogenous agents injuring the mucosal barrier are cortical steroids, acetylsalicylic acid, alcohol, caffeine and phenylbutazone.

Mucosal ischemia related to hypotension and stress provokes the development of ulcer. Skillman[16] defines stress ulcer as "a manifestation of serious complications following sepsis and shock and characterized by multiple acute superficial lesions usually occurring in the fundus and which bleed massively." Skillman[17] studied the effect of the gastric mucosal barrier to the passage of hydrogen ion in critically ill and normal patients and after hemorrhagic shock in the rabbit. The critically ill patients had increased rates of back diffusion. His studies strongly suggest disruption of the barrier function in the presence of a poor vascular per-

fusion is important in the pathogenesis of acute stress ulceration.

In a study of acutely ill general surgical patients, Gordon and colleagues[18] found that, in the acutely ill, death occurred more frequently in those suffering from an increase in the gastric mucosal permeability.

Stress ulcer then develops in situations with altered mucosal barrier effect, increased permeability and back diffusion of hydrogen ion, and in which there also is poor vascular perfusion and mucosal ischemia related to hypotension, sepsis and prolonged stress.

The histamine H_2 receptor antagonists pharmacologically block the action of histamine at the H_2 receptors of the parietal cells. The physiological response is diminution of basal gastric acid secretion and inhibition of gastric acid stimulated by food, histamine, pentagastrin and insulin.

To the extent that hydrogen ion is present and back diffusion occurs, the use of H_2 receptor antagonists is appropriate therapy in stress ulcer.

Cimetidine has been used prophylactically. Criteria calling for its use may simply consist of a pH which goes below 4 and a positive guiac test on nasogastric tube drainage, or prophylactic use can be arbitrarily started in high-risk situations such as renal failure and sepsis accompanied by hypotension.

Cimetidine in stress ulcer is symptomatic therapy, and measures against sepsis and renal failure are primary.

Interesting speculation arises in the mind of the clinician who has experienced repeated contacts with three generations of ulcer patients. There is the fact of familial propensity, the growing realization that diet control is a myth and that strenuous physical or mental work in the absence of emotional stress is not ulcerogenic.

Appreciation of the salutary effects of moderation and the benefits of change of environment, job or home responsibilities, or separation from real or imaginary abrasive contacts, strongly suggest that emotional stress is involved.

Limbic system, pituitary, hypothalamus or whatever, the origin of or the destruction of the physiologic safeguards that ordinarily maintain the constancy of the internal mucosal environment may soon be detected by electronic and biochemical advances. This is a procedure called positron emission transaxial tomography (PETT).[19] Whereas conventional tomography gives morphological data, this new form of tomographic imaging provides a look at local metabolic and physiological functions in tissue. It is non-invasive and makes use of physiological biochemicals and can detect small metabolic changes. Isotopes are incorporated into natural biochemical substances such as glucose and then are administered to the subject. Localization of these isotope-containing chemicals with the tomograph can show how they are transported in the body, where they are taken up into tissues and how quickly they are metabolized.

REFERENCES

1. Dragstedt LR: Some physiologic principles involved in the surgical treatment of gastric and duodenal ulcers. *Ann Surg,* 102:563, 1935.
2. Dragstedt LR: Pathogenesis of gastroduodenal ulcer. *Arch Surg,* 44: 439, 1942.
3. Edkins JS: The clinical mechanism of gastric secretion. *J Physiol,* 34: 133, 1906.
4. Edkins JS, Tweedy M: The natural channels of absorption evoking the chemical mechanism of gastric secretion. *J Physiol,* 38:263,1909.
5. Gregory RA: The isolation and chemistry of gastrin. *Gastroenterology,* 5:953-959, 1962.
6. Schofield MA: Vagal release of gastrin. *Gastroenterology,* 39:511, 1960.
7. Woodward ER, Robertson C, Fried W, *et al:* Further studies on the isolated gastric antrum. *Gastroenterology,* 32:868, 1957.
8. Grossman MI: Stimulation of secretion of acid by distension of denervated fundic pouches in dogs. *Gastroenterology,* 4:385, 1961.
9. Dragstedt LR, Oberhelman A Jr, Smith A: Experimental hyperfunction of the gastric antrum with ulcer formation. *Ann Surg,* 134:332, 1951.
10. Woodward ER, Lyon ES, Landor J, *et al:* The physiology of the gastric antrum: Experimental studies on isolated antrum pouches in dogs. *Gastroenterology,* 27:766, 1954.
11. Greenlee HB, Longlie H, Guerrero JD, *et al:* Inhibitory effect of pancreatic secretin on gastric secretion. *Am J Physiol,* 190:396, 1957.
12. Thompson JC, Reeder DD, Bunchman HH, *et al:* Effect of secretin on circulating gastrin. *Ann Surg,* 176:384, 1972.
13. Teorell T: On the permeability of the stomach mucosa for acids and some other substances. *J Gen Physiol,* 23:263, 1939.
14. Davenport HW: *Physiology of the Digestive Tract.* Pp. 101-102. Chicago: Year Book Medical Publishers, Inc., 1966.
15. Fisher RS, Cohen S: Pyloric sphincter dysfunction in patients with gastric ulcer. *N Engl J Med,* 288:273, 1973.
16. Skillman JJ: *Pathogenesis of peptic ulcer.* Post graduate course, Basic Science Problems in Surgery, Clinical Congress, American College of Surgeons, Chicago, 1973.
17. Skillman JJ, Gould SA, Chung RSK, *et al:* The gastric mucosal barrier: Clinical and experimental studies in critically ill and normal man and in the rabbit. *Ann Surg,* 172:564, 1970.
18. Gordon J, Skillman JJ, Zevas RT, *et al:* Divergent nature of gastric mucosal permeability and gastric acid secretion in sick patients with general surgical and neurological disease. *Ann Surg.* 178:285, 1973.
19. Check Wm: Medical News: Imaging jumps ahead with PETT. A report. *JAMA,* 241:675, 1979.

Maternal Mortality in Indiana: 1959-1977

WILLIAM RAGAN, M.D.[1]
JOHN DENTON, M.D.[2]
Indianapolis

IN INDIANA, the maternal mortality rate has fallen markedly since the 1930s. The death rate in 1930 was approximately 600 deaths per 100,000 live births. By the middle 1950s, the death rate had fallen to approximately 30 deaths per 100,000 births.

The Indiana Maternal Mortality Committee was established in 1955 with the objective of further reducing the maternal mortality rate in the state. Data from this committee have never been completely reviewed; thus, it is the purpose of this report to analyze these data as to death rate, preventability, and cause of maternal death.

PROCEDURE

The Maternal Mortality Committee is composed of obstetricians and specialists in anesthesiology, cardiology, general practice, internal medicine, pathology, and urology. Death certificates are screened by the State Board of Health for obstetrical complications and referred to the Committee. In each case, the Committee sends a consultant who interviews the physician, reviews the hospital record, and contacts the pathologist and any other consultants who might have become involved in the case. The consultant prepares a summary for the Committee. In the review of each case, four questions are asked:

- Was the death an obstetrical death?
- Is the diagnosis on the death certificate correct?
- Was the death preventable?
- If so, did the preventability rest with the patient, the doctor, or hospital?

A discussion of the preventability of each maternal death and the predisposing factors is conducted by the Committee following each case review. At the close of this discussion, the Committee voices its opinion by ballot as to the cause of death and the preventability of the death.

The data in this study are drawn from a cumulative data record kept by the Study Committee. There are three uninvestigated cases in the 1976 and 1977 data. The cause of death in these cases was determined from the patient's death certificate. The number of births in 1977 had not yet been computed by the State Board of Health at the time this paper was prepared; therefore, the 83,000 births listed is an estimate.

RESULTS

Table 1 summarizes the death rate per 100,000 live births between 1959 and 1977. *Table 2* shows the death rate per 100,000 births in five-year periods from 1959 to 1963, 1964 to 1968, 1969 to 1973, and 1974 to 1977.

Table 3 presents the percentage of preventable deaths each year. In a small number of cases either the preventability of the death could not be determined or the case had not been investigated. These cases are not included in the computation of the percentages.

TABLE 1
Death Rate Per 100,000 Births: 1957-1977

Year	Births	Maternal Deaths	Deaths/100,000 Births
59	114,239	34	29.8
60	114,281	34	28.9
61	113,768	41	36.0
62	110,277	47	42.6
63	108,403	35	32.3
64	107,443	33	30.7
65	99,345	33	33.2
66	96,939	22	22.7
67	94,835	29	30.8
68	92,725	20	21.6
69	95,015	14	14.7
70	100,624	7	6.9
71	96,666	28	29.0
72	88,230	9	10.2
73	84,827	15	17.7
74	89,184	13	15.4
75	83,258	7	8.4
76	81,428	14	17.2
77*	83,000	7	8.4

* Estimated number of births

[1]Chairman, Indiana Maternal Mortality Committee, Indiana University Medical Center, Indianapolis.
[2]Chief Resident Physician, Obstetrics and Gynecology, Indiana University Medical Center, Indianapolis.

Tables 4 and 5 compare the various causes of maternal death and the per cent of the total deaths by each cause during each year. Listed under **hemorrhage** are deaths secondary to ruptured uteri, ectopic pregnancies, placenta previa, abruption, uterine atony, and retained placental fragments. Deaths listed under **abortion** are deaths secondary to bleeding and infection following abortions. Listed under **medical complications** are deaths caused by postpartum myocardiopathy, fluid and electrolyte imbalances, myocardial infarctions, and cerebrovascular accidents occurring during pregnancy. Deaths included under the heading of **embolic phenomena** are deaths due to air emboli, amniotic fluid emboli and thromboembolism. When there was more than one underlying complication during a pregnancy, the cause most likely precipitating the death was used in the analysis.

Table 6 is a comparison of the various causes of maternal death divided in five-year periods, 1959-1963, 1964-1968, and 1969-1973. From this data, certain trends in maternal mortality can be identified.

DISCUSSION

Tables 1 and 2 demonstrate a substantial decrease in the maternal death rate over the 19-year study period. This decline has been steady and constant. The death rate in the years 1959-1963 was 33.9/100,000 births; in 1964-1968, 27.8/100,000 births; in 1969-1973, 15.7/100,000 births; and in 1974-1977, 12.4/100,000 births.

TABLE 2
Death Rate
Per 100,000 Births
in 5-Year Periods

Year	Deaths/ 100,000 Births
59-63	33.9
64-68	27.8
69-73	15.7
74-77	12.4

Table 3 shows that the percentage of preventable deaths has remained high. Eighty six per cent of all deaths in the study in which the preventability could be determined could have been avoided.

The major cause of maternal death traditionally have been listed as; 1) Hemorrhage; 2) Infection, and 3) Toxemia. However, in this study period, the major causes of maternal death were; 1) Hemorrhage (132); 2) Infection (74), and 3) Embolic phenomena (63). Toxemia was fourth on the list with 61 maternal deaths. There were 47 deaths related to medical complications, 27 anesthesia deaths, 24 abortion-related deaths, and 13

TABLE 3
Per cent of Preventable Deaths in Each Year

Year	No. of Deaths	No. of causes which preventability could be determined	No. Preventable Deaths	Percentage of Preventable Deaths
59	34	34	30	88.2
60	34	33	30	90.9
61	41	38	33	86.8
62	47	46	40	86.9
63	35	34	31	88.6
64	33	33	27	81.8
65	33	32	27	84.4
66	22	22	17	77.3
67	29	27	22	81.5
68	20	19	18	94.7
69	14	13	10	76.9
70	7	7	7	100.0
71	28	27	25	92.6
72	9	9	9	100.0
73	15	14	13	92.8
74	13	12	10	83.3
75	7	7	6	85.7
76	14	12	12	100.0
77	7	6	3	50.0

deaths due to trophoblastic disease.

Hemorrhage remains the primary cause of maternal death. 28.3% of all maternal deaths in the years 1959-1973 were due to hemorrhage. Deaths due to hemorrhage increased to 43.9% of all maternal deaths in the years 1974-1977. The majority of these deaths were due to ectopic pregnancy. Almost all of these deaths could have been prevented with early diagnosis and adequate fluid and blood replacement.

Deaths due to infection rank second, with 74 deaths over the study period. However, in the 1974-1977 period, only two deaths, or 4.9% of the maternal deaths, were attributable to infection.

Deaths due to embolic phenomena surprisingly rank third. There was no real change in the relative percentage of embolic deaths over the study period. In the years 1959-1963, 10% of all maternal deaths were related to embolic disease; in 1964-1968, embolic deaths accounted for 19.7% of all deaths; in 1969-1973, 15.1% of all maternal deaths; and in 1974-1977, 12.1% of all maternal deaths.

The percentage of deaths related to toxemia increased from 10.5% in 1959-1963 to 22.0% in 1974-1977. The increase in toxemia-related deaths was steady over the study period. Review of individual case histories indicated that this increase was related to the failure of attending physicians to make a correct early diagnosis of the disorder and to employ proper management.

There has been a significant decrease in maternal deaths related to medical complications. Deaths from medical complications decreased from 14.1% in 1959-1963 to 4.9% in the 1973-1977 period. This decline is probably related to increased availability of medical care and an increased willingness to obtain medical consultation.

Abortion-connected deaths have all but ceased to be a factor in maternal deaths in Indiana. From 1959-1963, there were 17 deaths due to abortion or 8.9% of all maternal deaths. In the years 1969-1973, there were only three abortion-related deaths, or 4.1% of all deaths. From 1974-1977, there was only one abortion-related death, or 2.4% of all deaths. This decline may be explained by the fact that the availability of medically conducted abortions has increased.

The relative percentage of deaths due to anesthesia and deaths related to trophoblastic disease fluct-

TABLE 4
Causes of Maternal Death: 1959-1977

Year	No. of Deaths	Hemorrhage	Infection	Toxemia	Embolic	Abortion	Anesthesia	Trophoblastic Disease	Medical Complications	No Cause of Death Determined
59	34	15	7	3	1	2	2	0	4	
60	34	10	5	3	2	3	4	0	7	
61	41	11	7	4	8	4	3	0	4	
62	47	14	9	3	5	4	4	0	8	
63	35	5	8	7	4	4	1	1	4	1
64	33	12	4	4	6	1	3	2	1	
65	33	9	5	3	6	0	0	2	8	
66	22	4	0	5	8	1	0	2	2	
67	29	8	6	3	6	0	2	2	2	
68	20	6	4	6	1	1	0	1	1	
69	14	1	5	4	3	0	0	0	1	
70	7	1	4	0	1	1	0	0	0	
71	28	11	3	3	5	2	3	0	1	
72	9	4	1	3	0	0	1	0	0	
73	15	3	4	1	2	0	2	1	2	
74	13	6	2	1	1	0	0	2	1	
75	7	3	0	2	0	1	1	0	0	
76*	14	8	0	3	2	0	1	0	0	
77**	7	1	0	3	2	0	0	0	1	

* Includes one uninvestigated case of toxemia and one of embolic death
** Includes one uninvestigated case of medical complication of pregnancy

uated but did not change significantly over the study period. There were 13 deaths due to trophoblastic disease from 1959 to 1977. All of these deaths were potentially preventable with early diagnosis and proper treatment with follow-up.

SUMMARY

Maternal mortality decreased from 1959 to 1977. There was, however, no decrease in the percentage of preventable deaths. The leading causes of maternal death were: 1) hemorrhage; 2) infection; 3) embolic phenomena; and 4) toxemia. There was a steady increase in the relative percentage of toxemia-related deaths over the study period. At the same time, there were fewer deaths due to abortion and medical complications. From 1974 to 1977, there were also fewer deaths related to infection.

A study of maternal deaths in California between 1967 and 1971 also found a similar decrease in abortion-related deaths. However, that study revealed more deaths due to hemorrhage and sepsis and fewer toxemia-related deaths. Upon completion of this study, the California committee's work was discontinued because of the relatively low maternal mortality rate, i.e., 20 deaths per 100,000 births. With 86% of

TABLE 5

Percentage of Each Cause of Death During 1959-1977

Year	No. of Deaths	Hemorrhage	Infection	Toxemia	Embolic	Abortion	Anesthesia	Trophoblastic Disease	Medical Complications
59	34	44.1	20.6	8.8	2.9	5.9	5.9	0	11.8
60	33	30.3	15.2	9.0	6.0	9.0	12.1	0	21.2
61	41	26.8	17.0	9.8	19.5	9.8	7.3	0	9.8
62	47	29.8	19.1	6.4	10.6	8.5	8.5	0	17.0
63	35	14.3	22.8	20.0	11.4	11.4	2.8	2.8	11.4
64	33	36.4	12.1	12.1	18.2	3.0	9.1	6.1	3.0
65	32	27.3	15.2	9.1	18.2	0	0	6.1	24.2
66	22	18.2	0	22.7	36.4	4.5	0	9.1	9.1
67	29	26.7	20.0	10.0	20.0	0	6.7	6.7	6.7
68	20	30.1	20.0	30.0	5.0	5.0	0	5.0	5.0
69	14	7.1	35.7	28.6	21.4	0	0	0	7.1
70	7	14.3	57.1	0	14.3	14.3	0	0	0
71	28	39.2	10.7	10.7	17.8	7.1	10.7	0	3.6
72	9	44.5	11.1	33.3	0	0	11.1	0	0
73	15	20.0	26.7	6.7	13.3	0	13.3	6.7	13.3
74	13	46.2	15.4	7.7	7.7	0	0	15.4	7.7
75	7	42.8	0	28.6	0	14.3	14.3	0	0
76	14	57.1	0	21.4	14.4	0	7.1	0	0
77	7	14.3	0	42.8	28.6	0	0	0	14.3

TABLE 6

Percentages of Various Causes of Maternal Deaths in 5-Year Periods

Years	Hemorrhage	Infection	Toxemia	Embolic	Abortion	Anesthesia	Trophoblastic Disease	Medical Complications
59-63	28.9	18.9	10.5	10.5	8.9	7.3	.5	14.1
64-68	28.5	13.9	15.3	19.7	2.2	3.6	6.6	10.2
69-73	27.4	23.3	15.1	15.1	4.1	8.2	1.4	5.5
74-77	43.9	4.9	22.0	12.1	2.4	4.9	4.9	4.9

all maternal deaths in Indiana being preventable, a similar action here would appear to be premature.

Review of recent literature regarding maternal mortality reveals that, in most states, maternal mortality committees are still quite active and viable. With the current emphasis on perinatal mortality, we must not let the pendulum swing too far and forget about preventable maternal mortality.

BIBLIOGRAPHY

1. Ragan W: Indiana Maternal Mortality Committee. *J Indiana State Med Assoc,* 68:9, 769-771, September 1975.
2. Coppes JB, Messer: Maternal deaths in California, 1967-1971. *Am J Obstet Gynecol,* 393-401, June 1976.
3. Jimerson SD, Crosby WM: Maternal mortality in Oklahoma: Hemorrhage remains a problem. *J Okla State Med Assoc,* 71:6, 197-201, June 1978.
4. Renfroe SL, Bowers GR: Maternal deaths in Florida, 1975-1976: A Maternity Mortality Committee study. *J Fla Med Assoc,* 65:6, 434-437, June 1978.
5. Maternal Mortality Report for Ohio, 1974: The OSMA Committee on Maternal and Neonatal Health. *Ohio State Med J,* 74:5, 294-295, May 1978.
6. Greene JW Jr: From the files of the KMA Maternal Mortality Study Committee. *J Ky Med Assoc,* 76:4, 185-186, April 1978.
7. May WJ, Greiss FC Jr: Maternal mortality in North Carolina, 1971-1975. *NC Med J,* 39:2, 93-97, February 1978.
8. Rombolz WL: 1976 Nebraska maternal mortality review for Maternal Child Health Committee, Nebraska Medical Association. *Nebr Med J,* 64:1, 3-4, January 1978.
9. Grimes DA, Cates W Jr: The impact of state maternal mortality study committees on maternal deaths in the United States. *Am J Public Health,* 67:9, 830-833, September 1977.
10. Susong WA, Ziehm DJ: The Arizona Maternal Mortality Committee. *Ariz Med,* 33:12, 1025-1026, December 1976.
11. Hughes EC, Cochrane NE, Czyz PL: Maternal mortality study, 1970-1975. *NY State J Med,* 76:13, 2206-2212, December 1976.
12. Maternal Mortality. *Rocky Mt Med J,* 73:2, 99-100, March-April 1976.
13. Wiener WB: Maternal mortality in Mississippi, 1972. *J Miss State Med Assoc,* 16:12, 371-372, December 1975.
14. Hofmeister FJ: Mothers are still mortal. *South Med J,* 71:10, 1193-1196, October 1978.

BEFORE YOU BUY OR LEASE, CONSULT WITH DAVE WAITE LEASING

At Dave Waite Leasing you will find all kinds of new automobiles and trucks on display for immediate delivery.

With rising automobile costs, before you buy, you must consider leasing whether it is for business or personal use. Consider that you can lease:

Gas-saving Compacts as little as **$110*** Sporty Intermediates as little as **$130*** Lease a Luxury car as little as **$160***

*per month, for 36 month, (incl. tax)

Before you buy or lease, consult with us. Dave Waite Leasing is the leader and specialist.

Dave Waite Leasing

5199 N. Keystone/253-1501

WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

CANCER CORNER

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

Cancer Information Now Available by Telephone

The latest diagnostic and therapeutic information on specific neoplastic disease problems is now available to Indiana physicians, dentists and nurses by dialing a toll-free telephone number, 1-800-231-6970.

Recordings for this new telephonic cancer information service were produced by the M.D. Anderson Hospital and Tumor Institute at the University of Texas for Southern Medical Association members. The service is being introduced in Indiana by the Professional Education Committee of the American Cancer Society.

Toll-free callers need only identify themselves by name, address, city and state—then ask for the desired recording specifically by number. The toll-free number is operational between 9 a.m. and 9 p.m. (EST), Monday through Friday, and 9 a.m. to 1 p.m. (EST), Saturday.

A complete catalog of tapes is available through the American Cancer Society, 4755 Kingsway Drive, Indianapolis 46205. Requestors should identify themselves as a physician, dentist or nurse.

A partial listing of available tapes appears in the accompanying box.

Cancer Recordings

CALL 1-800-231-6970 TOLL FREE

ID No.	Title, Producer
748	Obstructed and Perforated Carcinoma of the Colon—*Robert C. Hickey, M.D.*
817	The Natural History, Diagnosis and Staging of Cancer of the Esophagus—*Robert S. Nelson, M.D.*
816	Diagnosis, Endoscopy, Cytology and Radiology in Gastric Cancer—*Robert S. Nelson, M.D.*
745	Clinical Aspects of Primary Hepatic Cancer—*Robert S. Nelson, M.D.*
746	Natural History, Pattern of Spread, Incidence, Epidemiology and Prognosis of Gastric Cancer—*Robert S. Nelson, M.D.*
815	Vitamin B-12 and Gastric Cancer—*Robert S. Nelson, M.D.*
843	Tumor Associated Antigen (Including CEA)—*Richard G. Martin, M.D.*
749	Polyps of the Lower Gastrointestinal Tract: Proposed Treatment—*Richard G. Martin, M.D.*
750	Recurrent Cancer of the Colon and Rectum—*Richard G. Martin, M.D.*
751	Colon and Rectal Cancer—*Richard G. Martin, M.D.*
747	Cancer of the Pancreas—*Richard G. Martin, M.D.*
844	The Surgical Treatment of Large Bowel Cancer—*Marvin M. Romsdahl, M.D., Ph.D.*
653	Colonoscopy: Indications for and Techniques—*Nicholas G. Bottiglieri, M.D.*
752	Management of Metastatic Hepatic Cancer—*Nicholas G. Bottiglieri, M.D.*
753	The Diagnosis of Hepatic Cancer—*Nicholas G. Bottiglieri, M.D.*
845	Problems in the Diagnosis of Cancer of the Pancreas—*Nicholas G. Bottiglieri, M.D.*
652	Small Bowel Tumors, Excluding Carcinoids—*Edward M. Copeland, M.D.*
898	Radiotherapy of Esophageal Carcinoma—*Howard T. Barkley, Jr., M.D.*
800	General Evaluation of Gastrointestinal Cancer—*William M. Shingleton, M.D.*
846	Zollinger-Ellison Syndrome: Surgical Management—*James C. Thompson, M.D.*
806	Immunology Tests for the Detection of Gastrointestinal Cancers: CEA and AFP—*Jack R. Groover, M.D. and Arvey I. Rogers, M.D.*
788	Surgical Treatment for Hypopharyngeal and Cervical Esophagus Cancer—*A. J. Ballantyne, M.D.*
896	Visceral Angiography of Hepatic and Pancreatic Tumors—*Harvey Goldstein, M.D.*
820	'Ostomy Appliances and Guidelines for Selection—*Doreen Starkey, R.N.*
812	Acute Colonic Intestinal Obstruction—*Herbert B. Greenlee, M.D.*
848	Duct Cell Carcinoma of the Pancreas—*George L. Jordan, Jr., M.D.*
899	Management of Hyperuricemia in the Treatment of Cancer—*Eugene M. McKelvey, M.D.*
911	Management of Carcinoma of the Anus and Perianus—*John L. Sawyers, M.D.*
922	Carcinoma of the Stomach: Surgical Management—*Marion J. McMurtrey, M.D.*
923	Highlights in Diagnosis of Cancer of the Pancreas—*Hamilton C. Bruni, M.D. and Robert S. Nelson, M.D.*

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



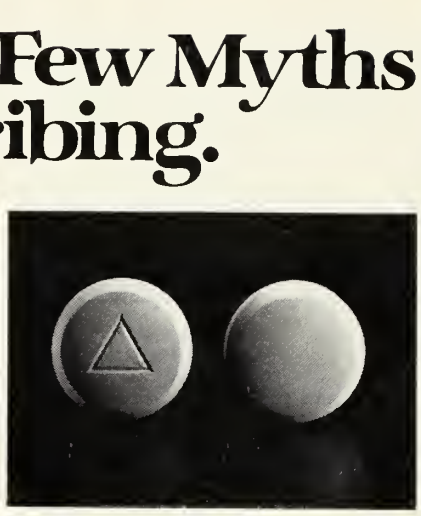
Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

The Maker

Examining a Few Myths About Prescribing.



Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.

FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.

MYTH: Industry favors only "expensive" brand names and denigrates all generics.

FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.

Matters.

MYTH: Generic options almost always exist.

FACT: About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.

FACT: Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

MYTH: Drugs account for a major portion of the rise in health care costs.

FACT: Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

MYTH: Government intrusions into the marketplace will save tax money.

FACT: Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal "help," such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

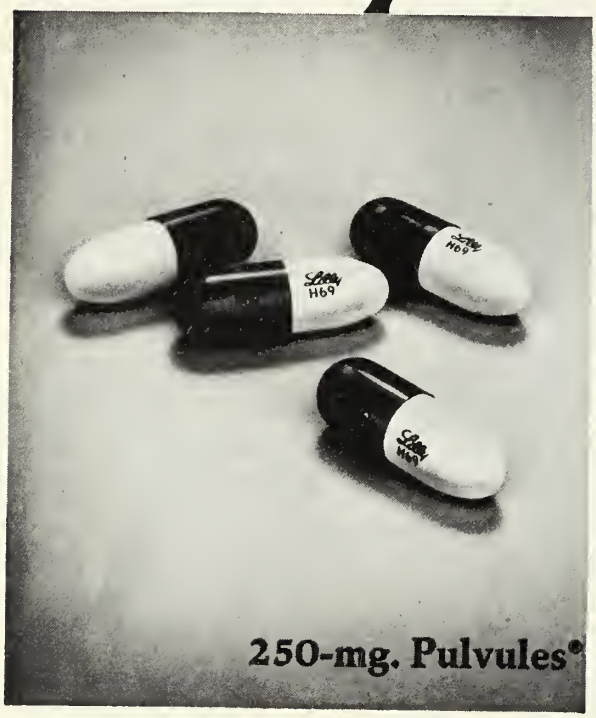
The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

PMA

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

easy to take







Keflex®
cephalexin

Lilly

Additional information available to the profession on request.
Eli Lilly and Company
Indianapolis, Indiana 46206

500738

CME QUIZ

Secondary Somatic Problems: Part 1

CONTINUED FROM PAGES 764-766

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana University School of Medicine, Division of Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46223.**

ANSWER THE FOLLOWING QUESTIONS:

1. A person with a psychosomatic complaint has
 a. no demonstrable physiological abnormality
 b. a definable, diagnosable physiological aberration
 c. a varied and multiple system complaint
2. The person with depression
 a. has little concern about his complaints
 b. is perplexed and confused by the persistence of his problem
 c. is very hopeful of relief
3. Depression may present to the physician as
 a. a sudden, exaggerated unremitting pain picture
 b. an intermittant problem that remits easily
 c. a precise clinical picture with positive laboratory findings
4. The physician should treat the psychosomatic problem
 a. with nonchalance and superficiality
 b. with excessive pressure on the patient to help himself
 c. with a professional, educative, and collaborative attitude
5. A person with depression should
 a. be told it is his "nerves" causing his fatigue and pain
 b. be given antidepressants and his morale encouraged
 c. never be referred to a psychiatrist
6. The person with a psychosomatic complaint
 a. will not likely be totally cured
 b. can be cured with no possibility of relapse
 c. will always be happy with the physician's efforts

Answer sheet for Quiz: (Secondary Somatic Problems: Part 1)

1. a b c	4. a b c
2. a b c	5. a b c
3. a b c	6. a b c

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in the next issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before Nov. 10, 1979, to the address appearing at the top of this page.

FUTURE FILE

Critical Care Problems

"Challenging Critical Care Problems" will be the subject of a CME course to be conducted by the University of Kentucky Medical Center Jan. 3-10, 1980. The location will be Marriott's Marco Beach Hotel, on Marco Island, Florida. Registration fee is $325. Thirty hours of AAFP credit and Category 1 AMA PRA credit.

For more information, write Frank R. Lemon, M.D., University of Kentucky Medical Center, Lexington, Ky. 40536.

Medical Assistant Workshop

The American Association of Medical Assistants, represented by its First District Chapter and its Indiana Society, will conduct a workshop in Evansville Nov. 11.

Topics to be covered include the various proposed national health care plans, medical review organizations, health planning systems, Medicare and Medicaid. Medical assistants and their bosses are invited, whether members or not.

Write Linda L. Hillyard, CMA, 106 N. Eastview, Ft. Branch, Ind. 47648, or call (812) 753-4679.

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Order now for early delivery on 1980 models.

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
317-472-3594
or TOLL FREE
1-800-848-3530

Fourth S.E.C.A.D. Scheduled

The Fourth Southeastern Conference on Alcohol and Drug Abuse will be held in Atlanta Dec. 5-9. It is approved for 27 Category 1 CEU credits. It is considered the largest professional meeting of its kind in the world.

For info, write Conway Hunter, M.D., Peachford Hospital, 2151 Peachford Road N.E., Atlanta, Ga. 30338.

Pediatrics Program in N. Mexico

The American Medical Women's Association will conduct a program at the Hilton Inn in Albuquerque, New Mexico, on the mornings of November 8 and 10. The theme is "Accent on Youth" and will familiarize the physician with new frontiers of medicine in pediatrics.

Write AMWA at 1740 Broadway, New York City 10019.

Sports Medical Clinic

A day-long sports medical clinic will be conducted in Hobart, Ind., Thursday, Oct. 25, beginning at 9 a.m. The clinic will be at Hobart High School, 36 E. 8th Street. Registration is $10, including luncheon and clinic notes.

For information, contact the school's Athletic Department at (219) 942-3100.

Sudden Death Symposium

A collaborative research effort in the area of sudden death, started in 1976 by a group of American heart specialists and their Russian counterparts under the auspices of the U.S. National Institutes of Health, will move to the Indiana University School of Medicine in Indianapolis for a major symposium Dec. 6-8.

The group will be hosted by Dr. Douglas P. Zipes and his laboratory at the Krannert Institute of Cardiology. Dr. Zipes, professor of medicine, director of cardiovascular research in the Division of Cardiology at the I.U. School of Medicine, and senior research associate at the Krannert Institute, I.U. Medical Center, is a member of the U.S. group of seven research scientists working with a comparable group of Soviet scientists.

The Soviet and American scientists met in Yalta on the Black Sea in October 1977 to participate in a joint U.S.-U.S.S.R. sudden death symposium. Dr. Zipes was one of a committee of three American experts who went to the Soviet Union in May of that year to organize the symposium.

FUTURE FILE

Legal Conference in Detroit

"Legal and Ethical Aspects of Treatment for the Critically and Terminally Ill Patient" is the subject of a one-day conference sponsored by the American Society of Law and Medicine. It is scheduled for Friday, Nov. 2, at the Detroit Plaza Hotel, Detroit, Mich. Attendance will be limited and advance registration is suggested. Registration fee is $50.

To register, send name, title, organization and mailing address together with check to American Society of Law & Medicine, 520 Commonwealth Ave., Boston 02215.

Louisville Pediatric Lecturer

The Louisville Pediatric Lecturer this year will be Doctor Professor Petter Karlberg of Goteborgs, Sweden. The lectureship will be held Oct. 31 at 11 a.m. in the Health Sciences Auditorium, Abraham Flexner Way, Louisville.

The Annual Newborn Symposium will be held at the same location Nov. 1-3 in commemoration of "The International Year of the Child." Doctor Karlberg and many other outstanding speakers will appear.

Contact Billy F. Andrews, M.D., University of Louisville School of Medicine, P.O. Box 35260, Louisville 42032. Tel: (502) 588-5753.

Postgrad Course in Milwaukee

The Medical College of Wisconsin in Milwaukee will conduct its 13th annual postgraduate course in Gynecological Pathology, Cytogenetics and Endocrinology Jan. 3-9, 1980 at the Pfister Hotel and Tower, Milwaukee.

The six-day course has been extended to include a complete up-to-date review of endocrinology and cytogenetics. It is limited to 150 registrants. A $450 enrollment fee will include 68 selected 35 mm slides. The fee is non-refundable. Approved for 55 cognate hours with ACOG and 43 hours in Category 1 for the PRA.

Write to Richard F. Mattingly, M.D., 8700 W. Wisconsin Ave., Milwaukee, Wis. 53226.

Impaired Physician Symposium

"The Impaired Physician: A Concern to Colleagues, Family and the Profession" is the subject of a three-hour symposium planned for Jan. 13, 1980 at 1:30 p.m. It will be held during the AMA's 33rd Winter Scientific Meeting in San Antonio, Texas. Rogers J. Smith, M.D. will be the moderator. Dr. Smith, a native of Indianapolis, practices psychiatry in Portland, Oregon, and has been chairman of the three AMA national conferences on physician impairment.

For information, write to Dept. of Scientific Assembly, AMA, 535 N. Dearborn St., Chicago 60610.

8-Week Retraining Program

A "Retraining Program for Clinically Inactive Physicians" will be conducted by the Medical College of Pennsylvania from Oct. 15 to Dec. 7 and from April 21 to June 13, 1980. The program is designed to facilitate re-entry of inactive physicians, both M.D.s and D.O.s, into clinical medicine through eight weeks of intensive clinical and didactic experience. The tuition is $1,950.

To apply, write to Office of Medical Education, Medical College of Pennsylvania, 3300 Henry Ave., Philadelphia 19129.

Polytomography of the Temporal Bone

The 21st two-day symposium on Polytomography of the Temporal Bone will be given under the auspices of The Wright Institute of Otology at Community Hospital, Indianapolis, Oct. 20-21. Participation meets the criteria for 12 AMA Category 1 credit hours. Fee for the course is $250.

Subjects include: Basic Anatomy of the Temporal Bone, Technique of Polytomography of the Temporal Bone and Pathological Conditions Revealed by Polytomography.

Contact The Wright Institute of Otology, Inc., Community Hospital of Indianapolis, 1500 N. Ritter Ave., Indianapolis 46219. Tel: (317) 353-5679.

INDIANA MEDICAL BUREAU
1010 East 86th St.—72 Winterton
Indianapolis 46240
844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service

FUTURE FILE

Thoracic Society Session

"Open Lung Biopsy vs. Transbronchoscopic or Needle Lung Biopsy in Diffuse Lung Disease" is the title of a scientific session of the Indiana Thoracic Society to be conducted Wednesday, Nov. 14 at the Sheraton West Hotel in Indianapolis.

Co-sponsored by the Indiana University School of Medicine, an application is pending for one Category 1 credit hour for the session.

For information, contact Ron Miller, American Lung Association of Indiana, 30 E. Georgia St., Room 401, Indianapolis 46204. Tel: (317) 632-3383.

Family Practice Seminar

An annual family practice seminar, sponsored by St. Mary's Medical Center in Evansville, will be held Nov. 8 at the center.

The program has been approved by the AMA for four Category 1 credit hours. It also has been approved by the AAFP for four prescribed hours.

The theme will be "Bowel and G.I. Malignancies." It will begin at 1 p.m.

For information, contact W. Thomas Spain, M.D., director of Medical Education, St. Mary's Medical Center, 3700 Washington Ave., Evansville, Ind. 47750. Tel: (812) 479-4000.

Blood Pressure Conference

A national conference on the "Current State of the Art in High Blood Pressure Control Applied to Rural Communities" will be conducted by the South Carolina Heart Association Oct. 25-27 in Myrtle Beach, South Carolina. Category 1 credit for 14 contact hours are offered.

Write to Mrs. Georgia L. Wingard, Division of Chronic Disease Control, 2600 Bull St., Columbia, South Carolina 29201.

ACS National Conference

"Cancer Prevention and Detection" will be the subject of the National Conference of the American Cancer Society April 17-19, 1980 at the Palmer House in Chicago. Cancer causation, prevention and detection will be discussed, with questions invited from the audience. Advance registration is requested. There is no registration fee. Category 1 credit for 14½ hours will apply to PRA and the AAFP.

Write to Nicholas G. Bottiglieri, M.D., 777 Third Ave., New York City 10017.

Tenuate® Ⓒ
(diethylpropion hydrochloride NF)

Tenuate Dospan®
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary
INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.
CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).
WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect, rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.
PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.
ADVERSE REACTIONS: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.
DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.
OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request from Medical Research Department, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon [Orillon], R.H., and Leyland, H.M.: A comprehensive review of diethylpropion hydrochloride. In, Central Mechanisms of Anorectic Drugs, S. Garattini and R. Samanin, Ed., New York, Raven Press, 1978, pp. 391-404.

Merrell

9-4672 (Y957A)

Overweight may not always be simple... complications can develop.*

Complicated or not...

Tenuate® Dospan® ©IV

(diethylpropion hydrochloride NF)

75 mg. controlled-release tablets



A useful short-term adjunct in an indicated weight loss program.

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

In uncomplicated overweight.

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

Clinical effectiveness.

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.[1] And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."[2] Compared with the amphetamines, diethylpropion has minimal potential for abuse.

Tenuate—it makes sense. And it's responsible medicine.

*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

Merrell

For prescribing information see opposite page.

Important data on the pain of acute cystitis:

In 87% of patients studied (303 of 349), Azo Gantanol® reduced pain and/or burning within 24 hours*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain **for the pathogens**

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

Before prescribing, please consult compl
uct information, a summary of which foll

Indications: In adults, urinary tract infec
complicated by pain (primarily pyelonep
pyelitis and cystitis) due to susceptible
(usually *E. coli, Klebsiella-Aerobacter, St*
coccus aureus, Proteus mirabilis, and, le
quently, *Proteus vulgaris*) in the absence
obstructive uropathy or foreign bodies. N
fully coordinate *in vitro* sulfonamide sens
tests with bacteriologic and clinical respo
aminobenzoic acid to follow-up culture m
increasing frequency of resistant organis
the usefulness of antibacterials including
fonamides. Measure sulfonamide blood l
variations may occur; 20 mg/100 ml sho
maximum total level.

Contraindications: Children below age 12
fonamide hypersensitivity; pregnancy at t
during nursing period; because Azo Ganta
tains phenazopyridine hydrochloride it is
dicated in glomerulonephritis, severe hep
uremia, and pyelonephritis of pregnancy
disturbances.

Warnings: Safety during pregnancy not es
Deaths from hypersensitivity reactions, ag
tosis, aplastic anemia and other blood dys
have been reported and early clinical sign
throat, fever, pallor, purpura or jaundice)
dicate serious blood disorders. Frequent
urinalysis with microscopic examination a
ommended during sulfonamide therapy.

Precautions: Use cautiously in patients wi
paired renal or hepatic function, severe al
bronchial asthma; in glucose-6-phosphate
dehydrogenase-deficient individuals in wh
dose-related hemolysis may occur. Mainta
adequate fluid intake to prevent crystallur
stone formation.

Adverse Reactions: *Blood dyscrasias* (agra
ulocytosis, aplastic anemia, thrombocytop
leukopenia, hemolytic anemia, purpura, h
thrombinemia and methemoglobinemia);
reactions (erythema multiforme, skin er
Stevens-Johnson syndrome, epidermal n
urticaria, serum sickness, pruritus, exfol
dermatitis, anaphylactoid reactions, perio
edema, conjunctival and scleral injection,
sensitization, arthralgia and allergic myoc
G.I. reactions (nausea, emesis, abdomina
hepatitis, diarrhea, anorexia, pancreatitis
stomatitis); *CNS reactions* (headache, per
neuritis, mental depression, convulsions,
hallucinations, tinnitus, vertigo and insom
miscellaneous reactions (drug fever, chills
nephrosis with oliguria and anuria, periart
nodosa and L. E. phenomenon). Due to c
chemical similarities with some goitrogens
uretics (acetazolamide, thiazides) and ora
glycemic agents, sulfonamides have cause
instances of goiter production, diuresis an
glycemia. Cross-sensitivity with these age
exist.

Dosage: Azo Gantanol is intended for the
painful phase of urinary tract infections. *U*
adult dosage: 2 Gm (4 tabs) initially, then
(2 tabs) B.I.D. for up to 3 days. If pain pe
causes other than infection should be sou
After relief of pain has been obtained, co
treatment with Gantanol (sulfamethoxazol
be considered.

NOTE: Patients should be told that the or
dye (phenazopyridine HCl) will color the u

Supplied: Tablets, red, film-coated, each
ing 0.5 Gm sulfamethoxazole and 100 mg
phenazopyridine HCl—bottles of 100 and

ROCHE

Roche Laboratories
Division of Hoffmann-La Ro
Nutley, New Jersey 07110

BOOK REVIEWS

Women Can Wait: The Pleasures of Motherhood After 30

Terri Schultz, with foreword by Don Sloan, M.D. Copyright 1979, Dolphin paperback original, Doubleday & Company, Inc., New York, N.Y. 191 pages, $4.95.

This book impresses me as one of a recent spate of books and magazine articles written for "popular" consumption and pretending to be scientific. In spite of its foreword this book is certainly not scientific but is pseudo-scientific. It takes the sociological (and feminist) approach and its argument is upheld entirely by data based on testimonials. In fact, the book consists chiefly of testimonials interlarded with sociological explanations and exhortations. Furthermore, the women interviewed seem with few exceptions to have been middle-class, or still higher class, women with better than average education and the interviews reported (many by quotation from tapes) have obviously been "hand-picked" to suit the author's theory. There is nothing remotely resembling the "controls" normally found in truly scientific data and no statistical support worthy of the name.

The reason is found in the back cover blurb: "Terri Schultz worked for four years as a columnist and reporter on the city desk of the CHICAGO TRIBUNE. Her articles have appeared in such publications as THE VILLAGE VOICE, REDBOOK, COSMOPOLITAN, OUI, NEW WOMEN, PENTHOUSE, VIVA, and WORKING WOMAN. . . . Her previous book is *Bittersweet: Surviving and Growing from Loneliness.* No wonder the book reads like a newspaper.

On the other hand, there are compensations. As an encouragement to women who find themselves well past 30 and pregnant or contemplating pregnancy, this book could be a friend in need—a boost for their beleaguered morale; but as a text for younger wives it might prove a snare and a delusion. This is primarily because in the entire discourse there is no research whatever into the situation of the *young* wife and no examples, inspiring or otherwise, for her contemplation.

Neither are there any pessimistic testimonials regarding motherhood after 30, and it is difficult to believe that *random* sampling of this field would come out with 100% rosy results. Threat of possible birth defects is mentioned, and brushed off rather summarily, with no "case reports" at all.

Her treatise on Caesarean Section is typical of the populist point-of-view. One case insisted on spinal anaesthesia instead of general, and ends with the statement: "More importantly, I feel wonderful that my band and I didn't submit out of fright or fatigue or rance to petty hospital rules, that we stuck up for at we wanted, and we got it." Both the patient and our reporter-author failed to realize that *no* hospital rule in regard to surgery is "petty." All operating-room rules have evolved from experience—sometimes sad experience.

The cover blurb also states: "The *medical* issues of older motherhood are illuminated with the most recent up-to-date facts and studies," but it fails to mention that the illumination is from a 10 Watt bulb and not a good, bright 100 Watt source.

Doctor, read it if you like—at least your insight into modern feminism will be increased.

A. W. CAVINS, M.D.
Terre Haute
Gynecology

The Year Book of Surgery 1978

Edited by Seymour I. Schwartz, M.D. Copyright 1978, Year Book Medical Publishers, Inc., Chicago 60601. 523 pages, with illustrations, $22.50.

If "what's new" was the only unifying theme, this yearbook could easily elude meaningful summarization. Critical analysis would then be limited to picayune comments about whether the editors have selected the best from the 1977 surgical literature. Fortunately, the six professorial annotators intellectually explore each abstract with such vigor that we are again treated to a book worth reading for the fine print. Thus, besides updating us, this book also teaches how to dissect clear thinking from sloppy thinking.

Highlights include the following. Albumin infusions are still being overused, cause complications, and waste money. Essential fatty acid deficiency is common. It can be treated by parenteral lipids or more simply by applying safflower oil to the skin. Peritoneal fluid alkaline phosphatase levels may indicate small bowel injury. Infected wounds containing vascular protheses are being healed without extensive surgery.

A feeling of depression still dominates the immunotherapeutic community—the subject now appears hopelessly complex. The heyday of superior mesenteric arterial pitressin for esophogeal variceal bleeding is over. Intravenous pitressin is safer and equally effective. Cellulose granulomas from disposable fabric lint are emerging as an important modern cause of intestinal obstruction. Enthusiasm for the continuous peritoneal-jugular shunt for ascites continues. And new syndromes associated with pancreatic islet tumors have been discovered—e.g., somatostatin-producing tumors may cause adult onset diabetes.

In conclusion, this book successfully accomplishes its goals, and can be recommended without hesitation.

ALAN T. MARTY, M.D.
Evansville
Cardiovascular Surgery

BOOK REVIEWS

Graft Materials in Vascular Surgery

Edited by Herbert Dardik. Copyright 1978, Symposia Specialists, Inc., Miami. 425 pages, with illustrations, $45.50.

Surgeons have long dreamed of replacing worn human parts with new ones. Arterial graft replacement began with vein autografts in the early 1900s. After 40 "silent" years, homografts appeared, followed by synthetic fabrics a decade later. Recently, interest has returned to biologic materials in two ways: Clinicians are again using homografts and heterografts, while scientists continue to study nature's secrets. Although no commercially available graft exhibits the viscoelastic, compliance, or antithrombotic characteristics of normal arteries, some of the newer synthetics may actually be able to "trick blood into thinking it is actually looking at the blood vessel wall." Such research, as documented in this book, augers well for small vessel replacement in the future.

In the meantime, new problems with some "old" grafts have come to light, e.g., tapered femoral-popliteal polytetrafluoroethylene (PTFE) grafts may occlude more often than cylindrical ones. Also, some patients develop graft versus host reactions to dacron. If cultures are sterile and perigraft swelling, mild erythema, and fluid collection persists, this syndrome can be cured by substituting any graft not made of dacron.

Seven essays in this multi-author text cover the basic sciences pertinent to arterial grafting. Twelve more then discuss the clinical and experimental use of dacron, teflon, PTFE, heparin bonded surfaces, pyrolytic carbon coatings, the exciting new synthetic elastomers, autogenous and allogenic veins, fibro-collagenous tubes, negatively charged glutaraldehyde-tanned collagen, and umbilical biografts. The 10 final chapters present clinical grafting results for lower extremity arterial reconstruction. Four discussion sections summarize, "in surgical, one-syllable vocabulary," the important points. In addition, self-evaluation quizzes and an opportunity to earn continuing education credits are provided.

While this book gives no final answers, it does communicate an appreciation and understanding of the major problems confronting the science and practice of vascular surgery.

ALAN T. MARTY, M.D.
Evansville
Cardiovascular Surgery



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS
Operated by PHYSICIANS
For the protection of PHYSICIANS

P&SLI

Physicians & Surgeons Liability Insurance Co., Inc
800 Mac Arthur Boulevard / Munster, Indiana 46321
219 836-2288

YOU'LL GET PROMPT PROFESSIONAL RESULTS WHEN YOU REFER A HEARING-IMPAIRED PATIENT TO A

Beltone®

Hearing Aid Specialist

IN INDIANA
YOUR INDEPENDENT AUTHORIZED DEALERS ARE:

Wayne Ankenbruck
Beltone Hearing Aid Service
628 East Wayne
Ft. Wayne, Indiana 46802
(219) 422-9821

Gene Armel
Beltone Hearing Aid Center
322 W. Main
Madison, Indiana 47250
(812) 265-2365

Milton A. Brinza
Beltone Hearing Aid Center
809 Merchants Bank Building
Terre Haute, Indiana 47808
(812) 232-8172

D. W. Childers
Beltone Hearing Aid Center
1128 - 16th Street
Bedford, Indiana 47421
(812) 275-7498

Beltone Hearing Aid Center
220 South Walnut Street
Bloomington, Indiana 47441
(812) 334-3918

Kenneth L. Hoon
Beltone Hearing Aid Service
2039 East Main Street
Richmond, Indiana 47374
(317) 962-4332

Charlie P. Johnson
Beltone Hearing Aid Center
1827 - 25th Street
P.O. Box 341
Columbus, Indiana 47201
(812) 372-1886

Van L. Julian
Beltone Hearing Aid Service
2574 Charlestown Road
New Albany, Indiana 47150
(812) 945-0235

Earl S. McDaniel, Jr.
Beltone Hearing Instruments
2801 Lincoln Avenue
Evansville, Indiana 47714
(812) 479-1437

Beltone of Vincennes
Security Bank Building
20 North 3rd - Suite 338
Vincennes, Indiana 47591
(812) 882-4715

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Anita Reid
Beltone Hearing Aid Service
1403 Brown Street
Anderson, Indiana 46016
(317) 643-3389

Beltone of New Castle
1936 South Memorial
New Castle, Indiana 47362
(317) 521-2970

Beltone of Muncie
1404 Granville Square
Muncie, Indiana 47362
(317) 288-8737

Beltone of Kokomo
404½ Arnold Court
Kokomo, Indiana 46901
(317) 453-1944

Beltone of Logansport
308 East Broadway
Logansport, Indiana 46947
(219) 753-3510

Beltone of Peru
51 South Broadway
Peru, Indiana 46970
(219) 472-1410

Tom Sotos
Beltone Hearing Aid Service
136 Sibley Street
Hammond, Indiana 46320
(219) 931-5272

Beltone Hearing Aid Service
4581 Broadway
Gary, Indiana 46409
(219) 884-4144

Stanley Thomas
Beltone Hearing Aid Service
724 W. Washington Avenue
South Bend, Indiana 46601
(219) 287-7221

Beltone Hearing Aid Service
401 West Marion
Elkhart, Indiana 46514
(219) 674-5957

G. A. Van Hoose
Beltone Hearing Aid Service
115 N. Pennsylvania Suite 1156
Indianapolis, Indiana 46204
(317) 632-3116

L. B. O'Connell
Beltone Hearing Aid Service
1906 East Main Street
Lafayette, Indiana 47901
(317) 447-6535

Beltone

WORLD LEADER IN HEARING AIDS AND HEARING TEST INSTRUMENTS

ELECTRONICS CORPORATION

4201 West Victoria Street · Chicago, Illinois 60646

An American Company



Forget Everything

you ever knew about borrowing

Money

Introducing a new loan:

THE PROFESSIONAL

so unique that we have over $4,000,000.00 in personal loans made to Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Colin G. Hozo
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis Morris Plan

Quinamm™

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS: For the prevention and treatment of nocturnal recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis, and static foot deformities.

CONTRAINDICATIONS: Because of the quinine content, Quinamm is contraindicated in women of childbearing potential, in pregnancy, in patients with known quinine sensitivity, and in patients with glucose-6-phosphate dehydrogenase deficiency. Hemolysis (with the potential for hemolytic anemia) has been associated with a G-6-PD deficiency in patients taking quinine.

PRECAUTIONS: Thrombocytopenic purpura may follow the administration of quinine in highly sensitive patients. Recovery will follow withdrawal of the medication.
Cinchona alkaloids, including quinine, have the potential to depress the hepatic enzyme system that synthesizes the vitamin K-dependent factors. The resulting hypoprothrombinemic effect may enhance the action of warfarin and other oral anticoagulants.

ADVERSE REACTIONS: Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. If ringing in the ears, deafness, skin rash, or visual disturbances occur, the drug should be discontinued.

DOSAGE AND ADMINISTRATION:
1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

Product Information as of September, 1977

U.S. Patent 2,985,558

Merrell

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®



for Knotts in the night



Quinamm™

each tablet contains quinine sulfate 260 mg., aminophylline 195 mg.

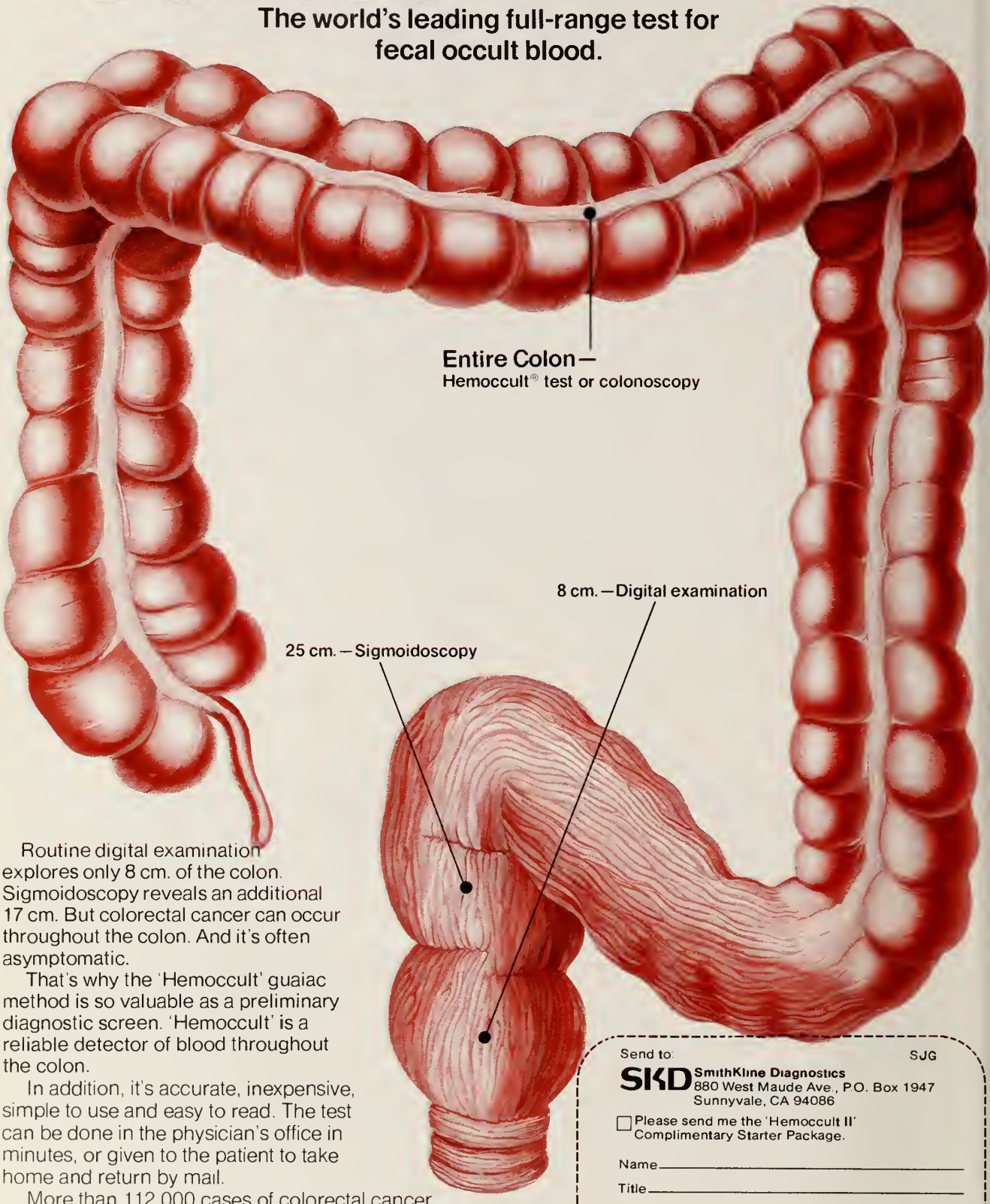
specific therapy for painful night leg cramps

Nocturnal recumbency leg muscle cramping is frequently an unwelcome bedfellow for many patients—especially those with arthritis, diabetes or peripheral vascular disease... consider Quinamm... simple, convenient dosage—usually just one tablet at bedtime... can provide restful, welcome sleep without night leg cramps.

See opposite page for prescribing information.

Hemoccult®

The world's leading full-range test for fecal occult blood.



Routine digital examination explores only 8 cm. of the colon. Sigmoidoscopy reveals an additional 17 cm. But colorectal cancer can occur throughout the colon. And it's often asymptomatic.

That's why the 'Hemoccult' guaiac method is so valuable as a preliminary diagnostic screen. 'Hemoccult' is a reliable detector of blood throughout the colon.

In addition, it's accurate, inexpensive, simple to use and easy to read. The test can be done in the physician's office in minutes, or given to the patient to take home and return by mail.

More than 112,000 cases of colorectal cancer will occur in the United States this year. The earlier they are diagnosed, the greater the chances for successful treatment.

'Hemoccult' is available through local distributors, nationwide.

Send to: SJG

SKD SmithKline Diagnostics
880 West Maude Ave., P.O. Box 1947
Sunnyvale, CA 94086

☐ Please send me the 'Hemoccult II' Complimentary Starter Package.

Name_____

Title_____

Institution_____

Address_____

City_____ State_____ Zip_____

Phone_____

CME QUIZ

Small Airways Disease

CONTINUED FROM PAGES 753-760

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana University School of Medicine, Division of Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46223.**

Answer the following questions: There is one correct response for each question.

1. Small airways contribute approximately what per cent to overall resistance to airflow in the lungs?
 a. 40%
 b. 90%
 c. 15%
 d. 85%
2. Which of the following statements regarding small airways disease or dysfunction is correct?
 a. The diagnosis of small airways disease may be made from the clinical history, physical examination and chest roentgenogram.
 b. Evidence of small airways disease is infrequently found in cigarette smokers.
 c. Evidence of small airways disease may be found in otherwise healthy and asymptomatic persons.
 d. The natural history of small airways disease is well established.
3. Disease or dysfunction in small airways may be assessed by which of the following tests?
 a. Forced vital capacity (FVC).
 b. Maximal voluntary ventilation (MVV).
 c. Forced expiratory flow ($FEF_{25-75\ \%}$).
 d. Forced expired volume in one second (FEV_1).
4. In young cigarette smokers:
 a. Abnormalities in tests of small airways are always present.
 b. Examination of small airways reveals normal histologic findings.
 c. Cessation of smoking does not result in return to normal of various tests of small airways function.
 d. Abnormalities in small airways function are associated with more rapid decline in lung function than in nonsmokers.
5. Concerning the various tests of small airways function:
 a. A normal FVC and FEV_1 with an $FEF_{25-75\ \%}$) less than 65% of predicted suggests the presence of small airways disease.
 b. Frequency dependence of compliance is easily measured in the physician's office using inexpensive equipment.
 c. "Mass" screening of subjects with these tests should be used to identify those with small airways disease.
 d. These tests are useful when the FEV_1 is reduced.

Answer the following questions "true" or "false".

6. The major site of airflow obstruction in chronic bronchitis and emphysema is in small airways (i.e., less than 2 mm diameter).
7. A 55-year-old man who smokes two packages of cigarettes daily has normal spirometry except for the reduced $FEF_{25-75\ \%}$. This patient will likely develop disabling chronic lung disease within the next 10-15 years.
8. Tests of small airways function offer no useful information in patients with a reduced FEV_1/FVC ratio.
9. A 35-year-old asymptomatic woman has smoked two packages of cigarettes daily for 12 years. Histological examination of her small airways would likely show mucous plugging, squamous metaplasia of epithelial cells and peribronchiolar inflammatory cell infiltrate.
10. The most effective way to reverse small airways disease is through the chronic use of bronchodilator drugs.

Answers to the CME quiz that appeared in the September issue of THE JOURNAL: "Management of Penetrating Thoracic Injuries," by John L. Glover, M.D., *et al.*

1. a b c d (all answers correct)
2. a b c d (all answers correct)
3. a b d
4. a b
5. d

Answer sheet for Quiz (Small Airways Disease)

1.	a b c d	6.	True	False
2.	a b c d	7.	True	False
3.	a b c d	8.	True	False
4.	a b c d	9.	True	False
5.	a b c d	10.	True	False

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in the next issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before Nov. 10, 1979, to the address appearing at the top of this page.

NEWS NOTES

Indiana Hospitals Are 10th Lowest

An average day in the hospital will cost a patient comparatively more in 40 other states and the District of Columbia than it will in Indiana, according to a study by Blue Cross of Indiana.

The study, using a ratio between per capita income and hospital costs, shows that Indiana had an adjusted average daily charge of $151.17, the 10th lowest state in the nation. Massachusetts, with a charge of $220.95, was the most expensive state for hospitalization. The national average was $173.98.

"The results," said Blue Cross of Indiana President Lloyd J. Banks, "reinforce the conclusion drawn previously in another study which showed that Indiana's unique hospital rate setting system proves that private sector efforts can be as effective, or even more effective, than state or federally mandated programs."

New Members Sought by Indiana Thoracic Society

The Indiana Thoracic Society, medical advisory arm of the American Lung Association of Indiana, recently invited ISMA members with potential specialty interests in pulmonary medicine to join their organization, according to Dr. Stephen Jay of Indianapolis, membership chairman.

Potential members should contact Dr. Jay or the chapter administrator at 30 E. Georgia St., Room 401, Indianapolis 46204. Tel: (317) 632-3383.

Indiana Jail Inmates to Benefit From AMA-ISMA Health Care Contract

Indiana jail inmates will benefit from $46,000 of a renewed $1,296,460 contract awarded to the American Medical Association (AMA) from the Law Enforcement Assistance Administration (LEAA) of the U.S. Department of Justice to help bring adequate health care to county jails nationwide.

Three years ago, Indiana became one of six pilot states selected to participate in the first phase of the program. To date, nine Indiana jails of 35 nationwide have been accredited by the AMA to meet specially formulated jail health-care standards, making Indiana the leader among other project states.

This safeguarding of inmates' health has become a task of state medical associations working with the AMA. Dwight Schuster, M.D. of Indianapolis is chairman of the Indiana Jail Project Advisory Committee of the ISMA, which coordinates law enforcement and correctional officers, lawyers, clergymen, physicians, nurses, ex-inmates, dentists and others to supervise implementation of the comprehensive program of jail health-care standards in the state. Assisting the Committee are ISMA staff members Sara Klein, R.N., and Michael J. Huntley.

The comprehensive program resulted from a five-year AMA study of the nation's jails, which disclosed a shocking inadequacy of health-care facilities in jails. The study revealed that (1) only 66% of the jails had *any* first-aid facilities; (2) only 38% had physicians available on a regularly scheduled basis; (3) 32% of the jails had *no* physicians available to provide care; and (4) acute and emergency cases treated in emergency room or doctors' offices constituted most health-care delivery.

The consequences of this inadequate jail health care resulted in a number of court cases that labeled inattention to inmates' health-care needs as "cruel and unusual punishment."

Under supervision of a licensed Indiana physician, the basic requirement of the AMA-ISMA standards of jail health care include inmate admission screening examinations to determine immediate health problems, routine physician examinations for those incarcerated longer than two weeks, availability of 24-hour first-aid and follow-up emergency care when necessary, alcohol- and drug-user rehabilitation, and improved record-keeping to insure the inmate of proper care as well as protect the sheriff's department from unnecessary legal battles.

Jails are opportune places to discover and treat disease that might otherwise infect the community. The AMA-ISMA jail health care project helps to halt the spread to the public of contagious diseases such as tuberculosis, venereal disease and hepatitis, the most common forms of jailhouse illness.

Other benefits include recognizing the inmates' legal rights to adequate health care and subsequent decreases in the incidence of adverse legal judgments resulting in restitutions using taxpayers' money.

Currently accredited jails in Indiana include those in Allen, Delaware, Green, Lake, LaPorte, Marion, Monroe, St. Joseph and Vanderburgh counties.

NEWS NOTES

Foreign Graduates Score Low

Results of the FLEX Examination held in June have been reported as follows by the Medical Licensing Board of Indiana:

Indiana University graduates scored 172 with passing grades and one failure;

American graduates from schools other than Indiana tallied five passes and two failures;

Foreign graduates recorded 150 passes and 408 failures.

A Look at the Handicapped

The 1979 Governor's Conference on the Handicapped will be held Oct. 18 and 19 at Stouffers Inn, Indianapolis. Various speakers, workshops and exhibits will be featured—all aimed at taking a realistic look at Indiana and measuring changes and improvements affecting the handicapped.

For information, contact the Indiana State Commission for the Handicapped at (317) 633-0286.

Foams for Fire Safety

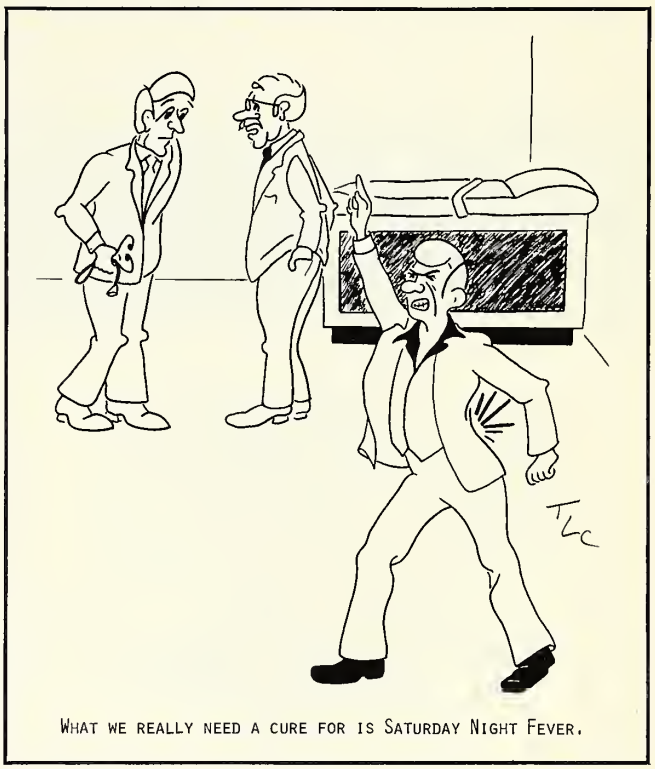
With flammable and combustible liquids in increased use, fires requiring foam extinguishment are more frequent, according to the National Fire Protection Association. "Fire Fighting Foam" is a slide-sound presentation that the NFPA has developed to introduce fire fighters to five types of foam extinguishing agents and the types of fires for which each is indicated.

The program consists of ninety 35mm color slides and a synchronized 12-minute cassette tape. It is priced at $42.50. Contact the NFPA at 470 Atlantic Ave., Boston 02210.

Central Indiana EMS Council

The Central Indiana Emergency Medical Service Council, which is concerned with Marion County and the seven contiguous counties, recently elected 14 first-time directors. The Council Directors are 40 in number and represent each of the 8 counties and at the same time represent all the various groups of professionals and technicians active in emergency medical care, including transportation.

Thomas Donnelly, a systems administrator at St. Francis Hospital in Beech Grove, is the new president of the Board of Directors. David R. Flynn has been executive director of the Council since its confirmation by HEW more than a year ago. The Council is responsible for evaluating the delivery of EMS services and for recommending improvements. It also fosters training of personnel and develops information and educational programs.



WHAT WE REALLY NEED A CURE FOR IS SATURDAY NIGHT FEVER.

Here and There . . .

. . . **Dr. Barbara Backer,** a LaPorte cardiologist, has been named chairman of the public health education committee, American Heart Association, Indiana affiliate.

. . . **Dr. Myrle E. Artis** of Kokomo has been appointed by the Governor to the state's Sickle Cell Anemia Advisory Council. **Dr. James M. Kirtley** of Crawfordsville was reappointed to the state's Commission for the Handicapped.

. . . **Dr. Gerald Strauss Young,** a Muncie pediatrician, has a monetary note bearing the personal signature of Lord Louis Mountbatten, killed in August in coastal water near Mullaghmore, Ireland. Dr. Young was evacuating wounded soldiers during the Burmese operation in World War II and had occasion to have the soldier-statesman sign the bill, a tradition among those flying out of the war area.

. . . . **Dr. Alvin J. Haley** of Fort Wayne will be one of 40 physicians in the U.S. to receive a signed limited-edition print of an original engraving of Plato as a prize in the Astra Pharmaceutical "On Pain and Sensation" sweepstakes

. . . Newest members of the American College of Radiology are **Dr. Efren V. Aruta** of Greenwood, **Dr. Thomas D. Breitweiser** of Madison, **Dr. Phillip G. Godsey** of Fort Wayne, **Dr. Newell O. Pugh Jr.** of Indianapolis and **Dr. Leonard J. Liebner** of Logansport.

PHYSICIANS' DIRECTORY

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
THOMAS L. McCONNELL, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

DAVID L. PHILLIPS, M.D.
JOHN J. SAALWAECHTER, M.D.
BEN H. PARK, M.D.
RITCHIE COONS, M.D.
Individualized Treatment for Alcoholism

KOALA CENTER



1711 Lafayette Avenue
Lebanon, Indiana 46052

(317) 482-3711

HAND SURGERY

By oppointment Phone 317-783-1319
VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.
Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery
3530 S. Keystone, Suite 305 Indianapolis 46227

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.
Certified: American Board of Colon and Rectal Surgery
Associate Fellow: Americon Society of Colon and Rectal Surgeons
Specializing in Colon and Rectal Surgery
214 Sherland Building
105 East Jefferson Blvd. South Bend, Ind. 46601

PSYCHIATRY

GORDON T. BROWN, M.D.
Diplomate, American Board of Psychiatry and Neurology
Adult and Adolescent
Psychotheropy, Consultation, Evaluation
Tel: (317) 923-3269
3266 North Meridian Street Indianapolis 46208

OPHTHALMIC PLASTIC SURGERY

Robert D. Deitch, M.D., F.A.C.S.

Fellow of the American Association of
Ophthalmic Plastic and Reconstructive Surgery

St. Francis Medical Arts Building
1500 Albany Street Suite 801
Beech Grove, Indiana 46107

PHONE ANSWERED 24 HOURS (317) 783-6187

INTERNAL MEDICINE

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Ahearn, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegeman, M.D.
Douglas F. Johnstone, M.D.
LeRoy H. King, Jr., M.D., FACP

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capitol, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

CLINICAL, ANATOMIC PATHOLOGY

THE MEDICAL LABORATORY

OF

DRS. THORNTON, HAYMOND, COSTIN, BUEHL, BOLINGER & WARNER

301 EAST 38TH ST., INDIANAPOLIS, INDIANA 46205

Phone: (317) 925-6466

COMPLETE LABORATORY SERVICES

H. C. Thornton, M.D. (1902-1978)
J. L. Haymond, M.D., F.C.A.P.
R. L. Costin, M.D., F.C.A.P.
I. A. Buehl, M.D., F.C.A.P.
G. L. Bolinger, M.D., F.C.A.P.
T. M. Warner, M.D., F.C.A.P.
F. D. McGovern, Jr., M.D., F.C.A.P.
R. O. McClure, M.D., F.C.A.P.
R. P. Hooker, M.D., F.C.A.P.

- MICROBIOLOGY
- SEROLOGY
- CHEMISTRY
- SURGICAL PATHOLOGY
- HEMATOLOGY
- COAGULATION
- FORENSIC
- CYTOLOGY
- EKG
- VETERINARY PATHOLOGY
- TOXICOLOGY
- HOUSE CALL PHLEBOTOMY
- COURIER SERVICES

CLINICAL AND ANATOMIC PATHOLOGY

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

CARDIOLOGY

WILLIAM K. NASSER, M.D.
MICHAEL L. SMITH, M.D.
CASS A. PINKERTON, M.D.

are pleased to announce the addition of

JAMES W. VAN TASSEL, M.D.

for the practice of cardiology and cardiac catheterization

8402 Harcourt Road, Room 413 Indianapolis 46260
St. Vincent's Professional Building (317) 257-9316

Physician Referral Only

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurological Surgery

1815 North Capitol Avenue Indianapolis 46202

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY
5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Troining for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

OBITUARIES

Owen L. Slaughter, M.D.

Dr. Slaughter, 59, an Evansville internist since 1949, died Aug. 23 at St. Mary's Medical Center, Evansville.

He received his M.D. degree in 1943 from the University of Nebraska and specialized in internal medicine at the Mayo Clinic from 1945 to 1948.

Dr. Slaughter became known nationally for his pioneer work on the effects on pilots of high altitude flying. The studies were made while he was employed at the Mayo Clinic and with the Aero Medical Laboratory at Dayton, Ohio, and the Naval Aero Medical Research Center in Pennsylvania.

Dr. Slaughter was a former chief of medicine, chief of medical education and president of the staff at St. Mary's Medical Center, where he started an intern program that has grown into a full program of residencies.

John L. Arbogast, M.D.

Dr. Arbogast, 75, an Indianapolis pathologist who served as director of the division of Allied Health Sciences at the Indiana University School of Medicine from 1965-1972, died Aug. 30 in Indiana University Hospital.

He was a 1936 graduate of the I.U. School of Medicine. He served with the Army in India and Burma during World War II.

Dr. Arbogast joined the I.U. Medical School faculty in 1937, and eventually became head of the clinical pathology department there. After retiring, he served as staff physician at the Marion County home. He was the first commissioner of medical technology appointed by the board of directors of the American Society of Clinical Pathologists, and he helped form the Association of Schools of Allied Health Professions in 1967.

He had been a senior member of the ISMA since 1975.

Robert N. Kabel, M.D.

Dr. Kabel, 63, a retired Terre Haute orthopedic surgeon, died Aug. 11 in Naples (Fla.) Community Hospital.

He was a 1940 graduate of the Indiana University School of Medicine and was a veteran of World War II. He retired in 1976 and moved to Florida.

Dr. Kabel was certified by the American Board of Orthopaedic Surgery. He was a member of the American College of Surgeons, the American Academy of Orthopaedic Surgeons and the Indiana Bone and Joint Club.

Joseph L. Gordon, M.D.

Dr. Gordon, 83, a Wheeler physician, died Aug. 19 at his summer home along the Kankakee River.

He received his M.D. degree in 1922 from the University of Louisville.

Dr. Gordon was a senior member of the Indiana State Medical Association and was enrolled in its Fifty-Year Club in 1972.

Kenneth L. Craft, M.D.

Dr. Craft, 89, a retired Indianapolis otolaryngologist, died Aug. 29 at his home.

He was a 1916 graduate of the Indiana University School of Medicine. He retired in 1971 after practicing 51 years.

During his practice, Dr. Craft was editor of the medical journals of the American Society of Ophthalmologic and Otolaryngologic Allergy and of the Indiana Academy of Ophthalmology and Otolaryngology.

Dr. Craft was a senior member of the ISMA and was enrolled in its Fifty-Year Club in 1966. He was a member of numerous professional organizations including the American College of Allergists, the American Academy of Ophthalmology and Otolaryngology, and the American Board of Otolaryngology.

Dinker A. Patel, M.D.

Dr. Patel, 42, a native of Kenya who practiced in Terre Haute since 1977, died Sept. 1 at Union Hospital in Terre Haute.

He earned his medical degree in 1962 in India and practiced in India, Kenya, Great Britain and Canada before moving to the United States with his family three years ago.

Dr. Patel, associated with the Associated Physicians and Surgeons Clinic at the time of his death, was a member of the Staff at both Union Hospital and Terre Haute Regional Hospital.

Stanton L. Bryan, M.D.

Dr. Bryan, 69, an Evansville internist, died Aug. 18.

He was a 1935 graduate of the Indiana University School of Medicine.

Dr. Bryan was certified by the American Board of Internal Medicine.

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

THE FORT WAYNE Medical Education Program, Fort Wayne, Ind., is accepting applications from individuals with competency in Family Practice Residency Training for the position of Director, Family Practice Residency. This is an excellent opportunity to combine teaching, patient care, and administrative duties with innovative educational and clinical programs. The Program utilizes the facilities of three community hospitals. We have recently moved into new facilities including a 24-exam-room Family Practice Center. Private patient privileges and salary are negotiable. Applicants must possess the M.D. degree, the ability to be licensed in Indiana and be Board Certified in Family Practice. Inquiries, credentials and a curriculum vitae with references should be mailed to: Sister M. Kathleen Quinn, Chairperson, Search & Screen Committee, Fort Wayne Medical Education Program, 2414 E. State Blvd., Fort Wayne, Ind. 46805.

OPHTHALMOLOGIST—Board certified/eligible to associate with Ophthalmologist in large Anterior Segment surgical practice. Can do Anterior Segment surgery as well as general ophthalmologic practice. Please forward Curriculum Vitae to Box 8708, Toledo, Ohio 43623.

INTERNIST, SOUTHEAST—Private practice opportunity in medium-sized city with new 150-bed hospital. Complete financial assistance. Family-oriented community. Send curriculum vitae in confidence to Mr. William Anderson, Search Director, 4470 Chamblee Dunwoody Road, Suite 350, Atlanta, Georgia 30338.

COMMUNITY HOSPITAL, INC., OF INDIANAPOLIS, INDIANA is seeking a Board Certified or Board Qualified Family Physician for the position of Assistant Director. Interested parties should send their pertinent information to W. E. Kelley, M.D., 5502 E. 16th St., Indianapolis, Ind. 46218.

MADISON, INDIANA—Luxury office space, finished to your specifications, is now available for lease to physicians in the 606 Professional Building. If you have ever considered relocating to this beautiful, progressive community, please phone for more information. George McAtee, Mavco Management Corporation, 117 W. Main St., Madison, Ind. 47250. Call collect (812) 265-3232.

PHYSICIAN—A fulltime Medical Director is needed to fill a position in an alcoholism treatment facility. A physician with empathy and expertise in the field of alcoholism is preferred. Competitive salary and benefits. For additional information, please send resume to OEI, 712 E. 65th St., Indianapolis, Ind. 46220.

SANIBEL ISLAND, FLORIDA—For rent: Beautifully furnished two-bedroom, two-bathroom condominium on the Gulf of Mexico. Screened porch. Sleeps up to six. Pool, tennis, and jacuzzi on premises. Golf courses nearby. Call (812) 332-5945 or (812) 339-6280.

Professional office space available in ideal west side Indianapolis Chapel Hill Professional Complex. 1240-3000 square feet. For information, call Mark Genung, (317) 271-1000.

Semi-retired GP wishes to share his centrally located medical office. Fully equipped, beautifully furnished and staffed. Free maintenance, utilities, and patient parking. Opportunity for flexible arrangement. Call 219-743-1178 or write to Dr. Alan R. Chambers, 101 Three Rivers Apts. East, Fort Wayne, Ind. 46802.

PHYSICIAN WANTED—Family physician to associate with established, incorporated, ABFP doctor. O.B. optional. Benjamin D. Bennett, M.D., 402 S. Berkley Rd., Kokomo, Ind. 46901. Tel: (317) 457-4416.

EMERGENCY MEDICINE—Urbana, Illinois, Oct. 1, 1979: One director and two staff opportunities in 250-bed hospital emergency room seeing 10,000 annual patient visits. Twin-city university community just 125 miles from Chicago and Indianapolis, 175 miles from St. Louis. 48 hours per week/48 weeks per year. $55,000-$62,000 minimum guarantee, excellent professional liability coverage provided. Call Bill Salmo immediately at 1-800-325-3982 toll free.

Indy Plasma Center, 38th & Illinois, Indianapolis, Ind., is looking for a retired licensed physician as Medical Director for their blood plasma collection center. Duties involve physicals on prospective donors, emergency care and supervision of medical procedures. Hours are AM only and five days per week. If interested, call Mrs. B. Novak at 317-924-6336.

OPPORTUNITIES FOR PSYCHIATRISTS—There are current openings among the Indiana State Hospitals at some locations in the state for psychiatrists of most experience levels. The salary schedule offers a very competitive income plus a generous package of fringe benefits. An adjunct practice is possible beyond the regular working hours and normal on-call responsibilities. Candidates must be licensable in Indiana. Please reply with a copy of the c.v. to: FORREST ASSOCIATES, P.O. Box 472, Murray, KY 42071 or call (collect) 502-753-9772. Forrest is retained by the Indiana Department of Mental Health.

INFORMATION WANTED: The Indiana Historical Society is conducting a project to locate and record archives and manuscripts in Indiana. This includes: 1. Personal correspondence between two or more individuals or between individuals and organizations. 2. Personal diaries and journals. 3. Records (account books, minutes, reports, correspondence) of businesses, organizations, associations, clubs, churches and similar groups. Anyone wishing to record such items is asked to contact Donald E. Thompson, Wabash College, Crawfordsville, Ind. 47933.

The Indiana Historical Society is gathering information for a third volume of Indiana authors. It will include the years 1967 through 1979 (or 1980) and the names of all those omitted from the first two volumes. To be eligible one must have been born in Indiana or lived in the state for a number of years, and must also have written a pamphlet or book. Contact Donald E. Thompson, Wabash College, Crawfordsville, Ind. 47933.



"Efficiency is the key to your practice"
Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE
6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

Are You Moving?

If so, please send change of address to Membership Dept., ISMA, 3935 N. Meridian St., Indianapolis, IN 46208, at least six weeks before you move.

Name _____

Address _____

City _____ State _____ Zip _____

County _____

IMPORTANT — Attach mailing label from your last Journal here.

ADVERSISERS IN THIS ISSUE

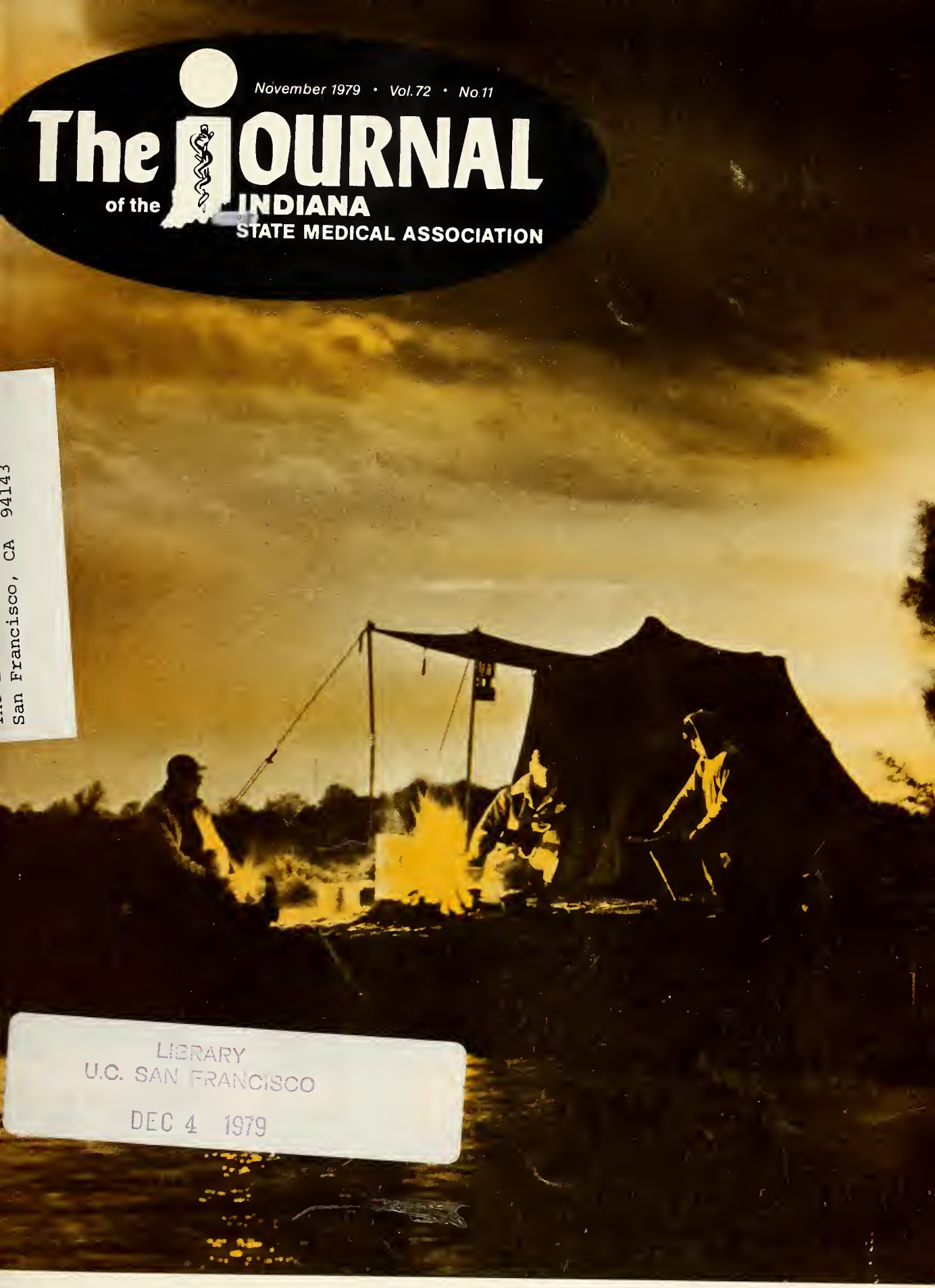
October 1979 Vol. 72 No. 10

American Fletcher National Bank 745
Beltone Electronics Corp. 789
Blue Cross-Blue Shield 737
Brown Pharmaceutical Co., Inc. 777
Burroughs Wellcome Company 735
Commercial Announcements 799
Dave Waite Leasing 775
Eli Lilly and Company 780
Hanger Protheses 734
Immke Circle Leasing, Inc. 782
Indiana Medical Bureau 783
Loma Linda Foods 733
McClain Car Leasing, Inc. 746
Medical Protective Company 766
Merck Sharpe & Dohme 752
Merrell-National, Inc. ..740, 741, 742, 784, 785, 790, 791
Morris Plan 790
P&SLI 788
Pharmaceutical Manufacturers Assn. ..778, 779
Physicians' Directory 796
Professional Careers Institute 800
Roche Laboratories Covers, 786
Smith Kline Diagnostics 792
Smith Kline & French 739
Tarkington Tower 761
Townsend, J. Russell & Associates 747
Upjohn Company 749, 750, 751

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

November 1979 • Vol. 72 • No. 11

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

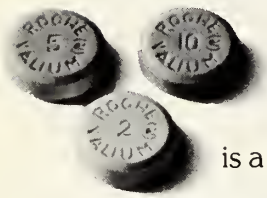


San Francisco, CA 94143

LIBRARY
U.C. SAN FRANCISCO
DEC 4 1979

Inside: **SCOLIOSIS AND THE FAMILY PHYSICIAN**
Another installment in the Continuing Medical Education Series

A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own. Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium® (IV)
diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

a prudent choice in psychic tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

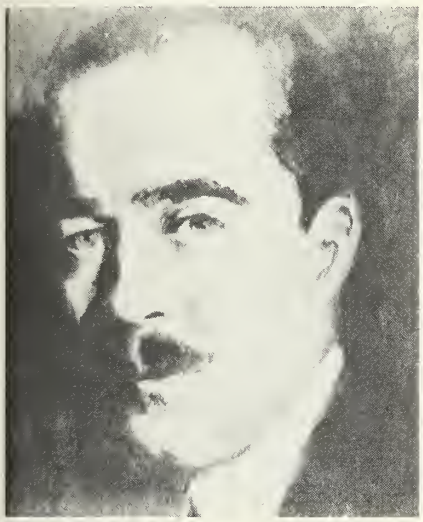
Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

MEDICAL MUSEUM NOTES

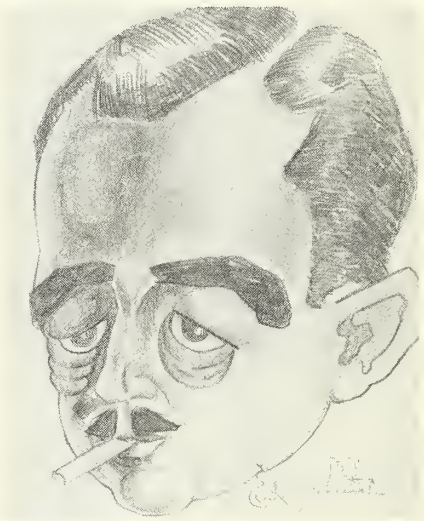
CHARLES A. BONSETT, M.D., Indianapolis



Sketch by
James Wynn, M.D.

The Faces of E. Rogers Smith, M.D. 1891-1972

. . . *Born in an Insane Asylum*



Caricature by
Terrance Billings, M.D.



Photo by
Noble Bretzman

The following courtroom scene actually happened:

The doctor has just completed his testimony in behalf of the defense. It is very damaging to the case of the plaintiff, whose attorney now stands and approaches the witness for cross-examination. The attorney's first question is meant to cast doubt on the doctor's credibility.

"Yes, or no, Doctor Smith. Is it true that you were born in an insane asylum?"

The jury, surprised, looks intently at the doctor for his reaction and his reply. The attorney's demeaning tone of voice has no effect on the doctor, except to produce a smile on his face.

"Yes," he replies. And, with a twinkle in his eyes, adds, "I not only was born in an insane asylum, I grew up in one." His disarming answer and broad grin cause laughter. The judge pounds his gavel for order.

The doctor is E. Rogers Smith, and he *was* born and reared in an insane asylum—at the Eastern Indiana Hospital for the Insane at Richmond in 1891, where his father, Dr. Sam Smith, was superintendent.

E. (for Edwin) Rogers Smith grew up in this environment, developed an interest in neuropsychiatry and, like his father, devoted his life to this specialized area of medicine. He was as much at home in the courtroom as in the insane asylum. He could not be caught off guard in either place.

The illustrations on this page—a photograph, a sketch and a caricature—are of Dr. Smith as a young man. The sketch was done by Dr. James Wynn, with whom Dr. Smith opened and shared an office in 1922. The caricature is by Dr. Terrance Billings, a 1936 graduate of Indiana University School of Medicine. Billings did this and other caricatures of I. U. professors while still a medical student (Medical Museum Notes, September 1977).

Throughout his long career, Dr. Smith was associated with the I.U. School of Medicine as a volunteer teacher of psychiatry and neurology. He was Emeritus Professor of Neurology at the time of his death at the age of 80, July 2, 1972.

The JOURNAL of the INDIANA STATE MEDICAL ASSOCIATION

Vol. 72, No. 11
NOVEMBER 1979

USPS 284-440
ISSN 0019-6770

SCIENTIFIC ARTICLES

833 **Scoliosis and the Family Physician—**
G. Paul DeRosa, M.D.
22nd Continuing Medical Education article

839 **Huntington's Disease—**
Ott B. McAtee, M.D.

842 **The Five Fingers of Cardiology—**
R. Joe Noble, M.D.

844 **Ruptured Abdominal Aneurysm—**
Peripheral Vascular Conference

846 **Part 2: Secondary Somatic Problems—**
David F. Wehlage, M.D.

849 **Clinical Notes: Dermatology—**
Jere D. Guin, M.D.

SPECIAL FEATURES

808 **Guest Editorial: Split Atoms, Not Wood**

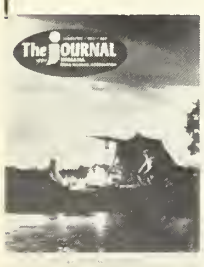
813 **Guest Editorial: Chicken Little at Three Mile Island**

816 **The American Dream: A Nightmare?**

824 **The Scalpel and the Pen**

DEPARTMENTS, MISCELLANEOUS

801 **Museum Notes**
804 **What's New?**
806 **Letters**
806 **There's a Word for It**
814 **Auxiliary Report**
850 **Cancer Corner**
852 **Book Reviews**
855 **CME Quiz**
856 **Future File**
861 **CME Quiz**
862 **News Notes**
868 **Statement of Ownership**



ABOUT THE COVER

Camping is one of the most popular types of vacations planned by families who visit Indiana. Campsites are open all year long, with some operating on limited facilities during the winter months. Areas for camping exist in more than half of Indiana's counties. PHOTO COURTESY OF INDIANA DEPT. OF COMMERCE

POSTMASTER: Send address changes to THE JOURNAL, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Ind. 46208.

EDITOR
Frank B. Ramsey, M.D.
MANAGING EDITOR
Martin T. Badger
BUSINESS MANAGER
Donald F. Foy

CONSULTING EDITORS
Charles A. Bonsett, M.D.
A. W. Cavins, M.D.
Samuel R. Mercer, M.D.
Lall G. Montgomery, M.D.
W. D. Snively, M.D.
I. W. Wilkens, M.D.

EDITORIAL BOARD
Elton Heaton, M.D.
Rodney A. Mannion, M.D.
(Terms expire Dec. 31, 1979)
Alvin J. Haley, M.D.
Wei-Ping Loh, M.D.
(Terms expire Dec. 31, 1980)
Steven C. Beering, M.D.
Paul S. Rhoads, M.D.
(Terms expire Dec. 31, 1981)

THE JOURNAL of the Indiana State Medical Association is published monthly in the interests of the medical profession of Indiana. No copyright claimed. Copyright rests solely with authors, who are responsible for statements made in their articles. Views expressed do not necessarily reflect the opinions of the editors. Scientific and editorial contributions are accepted for exclusive publication, subject to editorial requirements.

All issues since 1967 available on microfilm from University Microfilms, Inc., 300 N. Zeeb Rd., Ann Arbor, Mich. 48106. Indexed in Index Medicus and Hospital Literature Index.

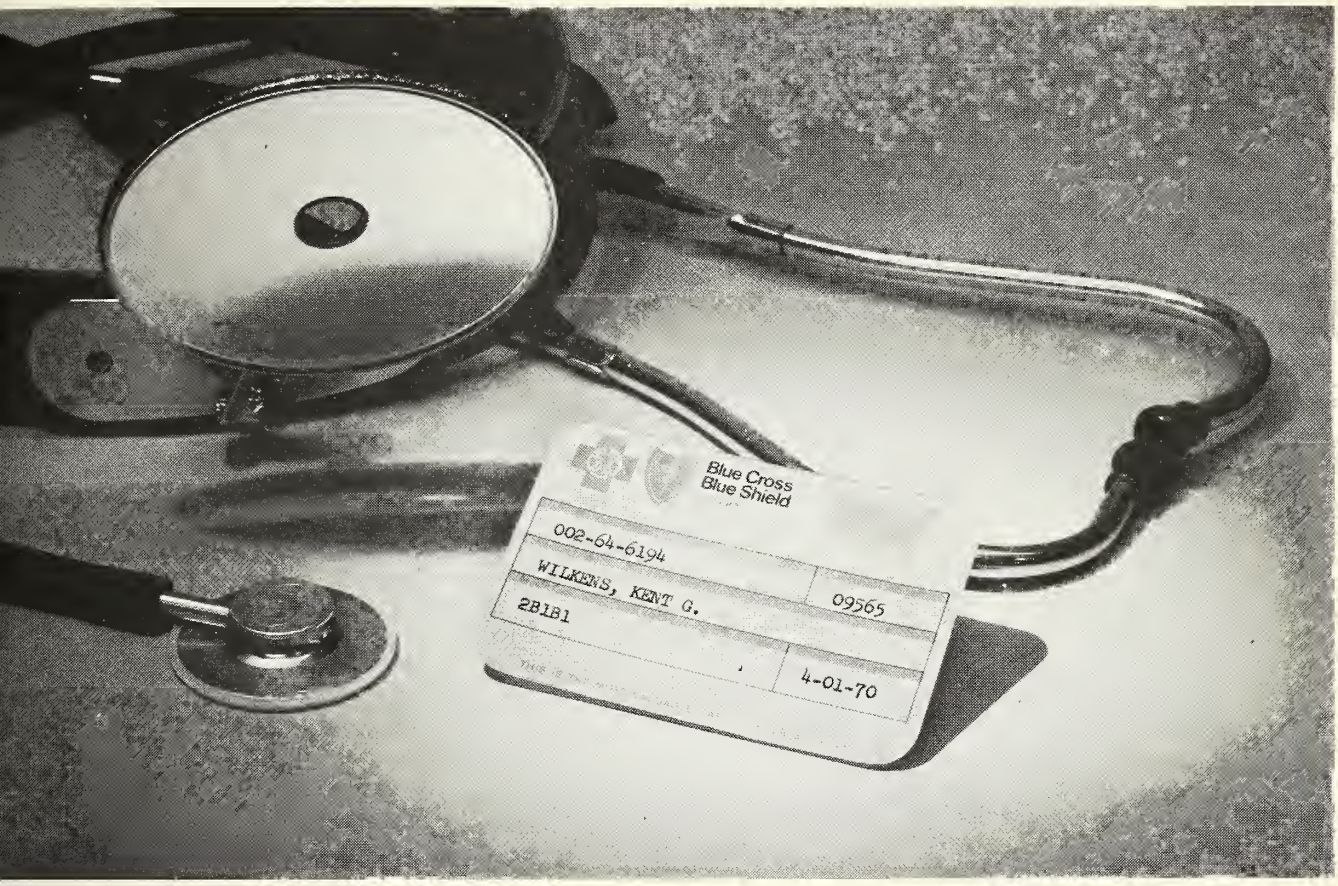
Advertising rates and data available on request. Representative for national advertising: State Medical Journal Advertising Bureau, Inc., 711 South Blvd., Oak Park, Ill. 60302.

Publication deadline: 1st day of month preceding month of issue.

Subscriptions: $14 per year, USA; $16, Canada; $17, foreign; $12, libraries; $10, senior ISMA members; $8, members; except for special issues, single copies not available. Subscriptions renewable only in January and July.

Second-class postage paid at Indianapolis Ind. and additional mailing office.

Take advantage of a great association!



Get these special benefits—available with your Medical Association membership

Expanded "people-planned" protection is now part of Blue Cross and Blue Shield coverage—and you're eligible! It's one more exclusive advantage of belonging to the Indiana State Medical Association—entitling you to special group rates for these benefits:

- One full year in-hospital care
- 100% semi-private room and hospital extras
- Allowances for surgery, anesthesia, obstetrics, medical visits, diagnostic and radiation therapy
- $250,000 Major Medical Benefits

That's not all. You also benefit from the immediate recognition and automatic acceptance of the Blue Cross and Blue Shield membership card. The special rates available through the Indiana State Medical Association membership make this coverage your best investment in personal protection. You can get it—now.

Call or write: Mel Torbeck, Mass Marketing Sales Representative, Blue Cross and Blue Shield of Indiana, 120 W. Market Street, Indianapolis, Indiana 46204. Telephone: (317) 263-4340.

120 West Market St.
Indianapolis, Ind. 46204

® Reg. Mark Blue Cross Assn.
℠ Reg. Serv. Mark. Nat'l Assn. of Blue Shield Plans

Blue Cross
Blue Shield
of Indiana

WHAT'S NEW?

THE 3M COMPANY has a four-color brochure that describes the Reston brand products now available for care of decubitus ulcers. Self-adhering foam pads, adaptable foam dressing pads, self-adhering foam rolls, disposable leveling mattresses, flotation pads and knit covers, and heel and elbow protectors for use on bony prominences are all illustrated and described. The brochure is free and may be obtained through a 3M representative or by writing to 3M care of Box 33600, St. Paul, Minn. 55133.

SCHERING announces two new non-prescription products for professional recommendation. Both are now at the local pharmacies. One is Coricidin Children's Cough Syrup. The other is extra strength Coriciden Sinus Headache Tablets, an aspirin-free formulation with Chlor-Trimeton, phenylpropanolamine HCL and acetominophen.

News of what is new in the medical supply industry is composed of abstracts from news releases by manufacturers —of pharmaceuticals, clinical laboratory supplies, instruments and surgical appliances—and book publishers. Each item is published as news and does not necessarily constitute an endorsement of a product or recommendation for its use by THE JOURNAL or by the Indiana State Medical Association.

CONTROL-O-FAX OFFICE SYSTEMS announces TELOG, a telephone control procedure that enables the determination of which telephone consultations are billable. It also provides a permanent record of all telephone calls for both legal protection and better patient service.

CUTTER RESIFLEX, a Division of Cutter Laboratories, has a sterile procedural tray for sample collection by culdocentesis. It provides the supplies necessary for proper collection and sample handling.

UPJOHN is introducing E-Mycin E liquid (erythromycin ethyl succinate), a bubble gum-flavored pediatric antibiotic. The new formulation is intended for children who need antibiotic therapy but who have difficulty swallowing tablets and an aversion to injections.

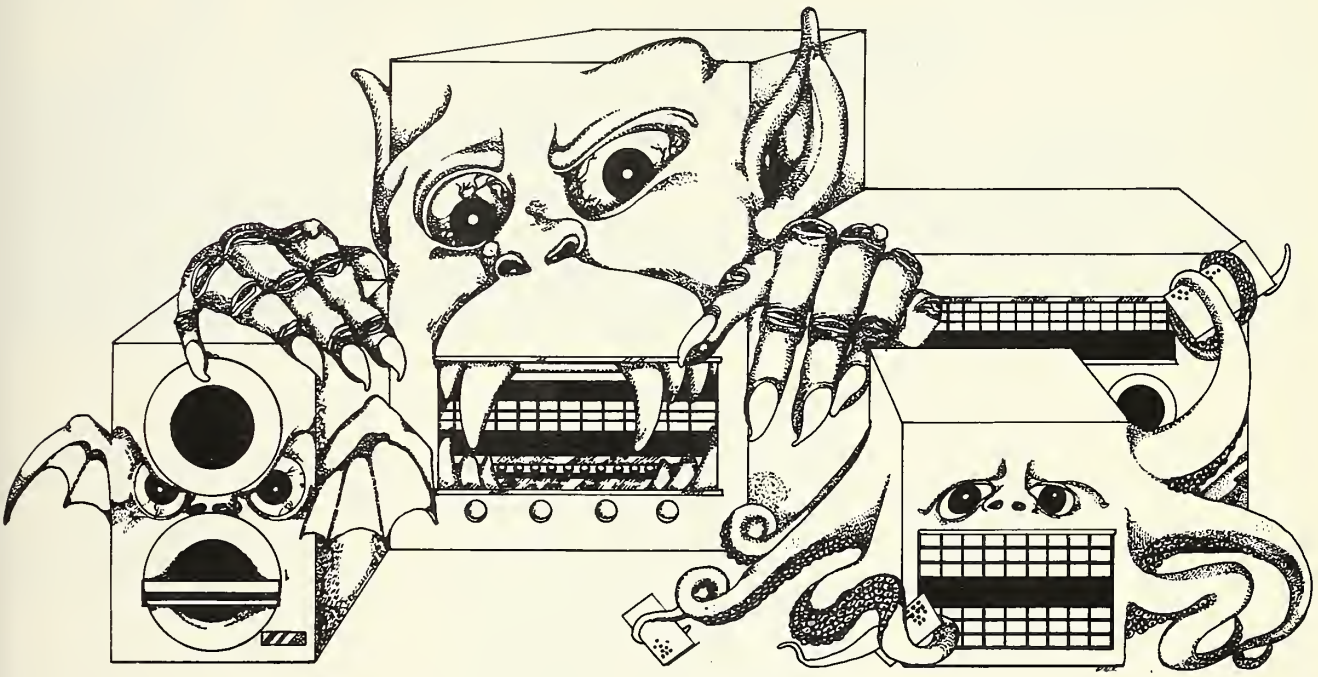
THE 3M COMPANY has a new ethylene oxide gas sterilizer with built-in safety features to help protect the operation from EO exposure. The safety features are based on solid state electronics. The sterilizer has a fully automatic system of controls.

CONTINUED ON PAGE 830

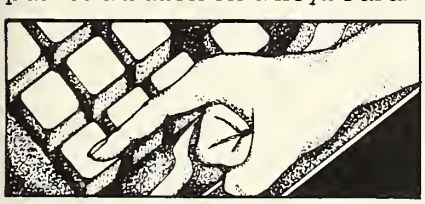
★
Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
Since 1899
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

Southern Indiana Office: Kenneth W. Moeller, Representative
Suite 624, 6100 Narth Keystane Avenue Telephane: (317) 255-6525
Mailing Address: P.O. Bax 20132, Indianapalis 46220
Narthern Indiana Office: Dauglas O. Sellan, Representative
120 LaSalle West Bldg., Suite 304
Sauth Bend, In. 46601 Telephane: (219) 289-7332

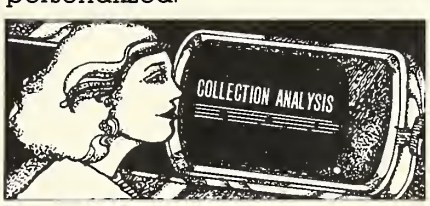
Have you heard the latest horror story about computers?



Relax. Fret no more. A computer for you need not be a nightmare. Ranac has come to the rescue with a highly simplified, horror-free minicomputer* system custom-designed to take over the management of your office as simply as a finger pushes a button on a keyboard.



An untrained finger can operate. A clerical person or receptionist with no previous computer or technical experience can be trained to operate it in just a few days. Ranac does all the training needed, right in your office. Any servicing too . . . prompt, personalized.



Paperwork replaced, clerical time cut up to 50%. Billing, insurance forms, collection control, patient history, procedures and diagnostic coding . . . these and just about all your present office functions processed automatically as the Ranac minicomputer takes over.

For solo, group and clinic practices. A system custom-planned for your size operation . . . and it can be designed so you won't ever outgrow it. The cost? Probably a lot less than you might think. Don't lose another day before finding out more.

RANAC
COMPUTER CORPORATION

Call collect or write: Ernest G. Heppner, Vice President • Ranac Computer Corporation
177 West Carmel Drive • Carmel, Indiana 46032 • (317) 844-0141

*by Data General Corporation, second largest manufacturer of minicomputers in the world

LETTERS

'PSRO VoPos'— The Author's Reply

(The following letter was prepared in reply to G. W. Eklund, M.D., Portland, Oregon, whose letter, "Agrees Medicine Is an Art; Rejects PSRO 'VoPo' Label," appeared on Page 744 of last month's issue of THE JOURNAL.

Thank you for your long and detailed letter of reply of 12 July to my article on PSRO VoPos. It's flattering to know that the article went as far as the west coast of the United States.

I am pleased to learn that you are in complete accord with my description of medicine as an art, and that you cherish the preservation of this concept.

But the definition of art, that it is a "personal, unanalyzable, creative force," doesn't seem to have much coin for you. Particularly the word, "unanalyzable." Your multiple efforts to explain why patients were not granted an extension of their hospital stays is a commendable exercise in analysis, just as the statistical documentation of HEW for the PSROs is quite an exercise in scientific and mathematical analysis.

Try as we may to analyze the unanalyzable, it is impossible to define an art with precision, even though the attempt be made by the federal government, with all of its money and force.

I think it's better to accept the wisdom of the ages, that art is unanalyzable, and not participate in such an exercise in sophistry—even though it is backed by the federal government and is designed to save the taxpayers' money and assure quality patient care.

Some of the results of the PSRO program, such as the three patient deaths in the small experience that I am aware of, show the fallacy of trying to analyze the unanalyzable, no matter how good our intentions are.

Thank you again for the time and effort you put into your letter. I found it interesting to read.

RICHARD J. NOVEROSKE, M.D.
Evansville, Ind.

Letters will be published as space permits and at the discretion of the editor. They will be subject to editing. Reader response is encouraged. Letters should be addressed c/o THE JOURNAL of the Indiana State Medical Association, 3935 N. Meridian St., Indianapolis 46208.

Guest Editorials

Two regular contributors to the editorial pages of THE JOURNAL take on the question of nuclear energy in this issue.

Dr. Richard J. Noveroske says he'd rather "Split Atoms, Not Wood," on Page 808; meanwhile, Dr. L. A. Arata shares his opinion of the nuclear situation with "Chicken Little at Three Mile Island," Page 813.

There's a Word for It

'Ana' in Anatomy and Analysis

RICHARD J. NOVEROSKE, M.D.
Evansville

The prefix *ana* means *up,* and we meet it in words like *anatomy* and *analysis.* There's a common tendency to then translate these words into *cutting up* and *breaking up* and let it go at that. But I think there's more to the feeling of these word stems than this quick translation of the Greek. The Greeks were geniuses at fusing meaning into the words they coined. The words are sometimes "over-determined," as Freud would say; there is more than one reason for their use.

There are other words, such as *dissect* that can be used to mean *to cut apart,* and *dissolve* that can be used if a *breaking up* is meant.

But we use *anatomy* and *analysis* with the implicit sense that something goes *up.* And it does, for knowledge is built up in our minds as a result of the cutting away on a body, organ, or tissue. This knowledge is the science of anatomy. Similarly as a thing or problem is intelligently, probingly broken up into its elements or more fundamental components, analysis occurs.

That's where the *up* is—in our minds, and I think these are excellent words.

2 NEW ISMA sponsored insurance plans available to you

Two new essential insurance plans have been added to broaden the range of ISMA sponsored plans. An In-Hospital Protection Plan and a Medicare Supplement Plan brings the total number of supplemental insurance plans to six that are available to eligible member physicians and professional corporations.

NEW PLANS:

IN-HOSPITAL PROTECTION PLAN provides cash benefits of $20 thru $100 per day (when accidental injury or sickness causes hospital confinement). Benefits are payable directly to you, the insured member, and commence the very first day of covered hospitalization. Intensive care and convalescent home benefits included. Spouses and eligible dependent children may be included. Benefits reduce at age 65.

MEDICARE SUPPLEMENT PLAN provides "gap filler" benefits so essential today. Medicare revised their benefits effective January 1, 1979 and these ISMA sponsored plans have been revised to update these changes, supplementing both Medicare Part A and Part B.

OTHER INSURANCE PLANS AVAILABLE:

- **INCOME PROTECTION PLAN** provides an income of up to $2,000 monthly if you are disabled and unable to work due to a covered accident or illness.
- **EXCESS MAJOR MEDICAL PLAN** provides coverage after your present plan is exhausted. Up to $500,000 coverage with a $20,000 deductible. Unlimited surgical schedule and includes extended care and nursing home benefit.
- **OVERHEAD EXPENSE PLAN** provides needed dollars to help you pay off overhead expenses (employees' salaries, rent, utilities, property taxes, etc.) in the event of your covered disability. When disability strikes—your business overhead expenses keep right on going—even when you can't.
- **FAMILY INSURANCE PLAN** provides benefits up to $100,000 in the event of your death.

Underwritten by Continental Casualty Co. and Valley Forge Life Insurance Co., Chicago, Illinois

COUPON

For information on the ISMA sponsored plans including costs, terminations, exclusions, etc.

☐ In-Hospital Protection Plan
☐ Medicare Supplement Plans
☐ Income Protection Plan
☐ Excess Major Medical Plan
☐ Overhead Expense Plan
☐ Family Insurance Plan
☐ Professional Corporation

Dr. _____

Street _____

City _____ Zip _____

Administered by



j. russell townsend and associates

Mail to:
Indiana State Medical Association
3935 North Meridian Street
Indianapolis, Indiana 46208

Guest Editorial

Split Atoms, Not Wood

RICHARD J. NOVEROSKE, M.D.
Evansville

Not only is the United States no longer exporting nuclear reactors or developing breeder reactors, but in October 1978 Congress passed a national energy bill that failed to mention nuclear power. The bill embraced almost every form of power known, but there was no mention of nuclear power. Congress appeared to be afraid to mention nuclear power because of fear of reprisal at the ballot box in the November 1978 elections.

The obstructionists to nuclear power are in control.

In 1978, opinion polls showed that the American public favored nuclear power by about two to one, but the environmentalist-obstructionists are a determined foe. They raise all kinds of hypothetical questions and demand perfect safety in a less than perfect world. And since the accident at Three Mile Island—an accident that caused much damage to the reactor core, but no deaths or injuries—they have had a heyday.

In October 1977, 233 nuclear plants were either in operation, under construction, or being planned in the United States. One year later, the number was only 203; cancellations and delays caused the decrease. Now no more nuclear power plants are being considered; the increased costs of overregulation and a furor of protest make non-nuclear power plants the easier option for electric companies. We're going backwards.

Few people understand radiation; so it's easy to cause hysteria about it. There is fear of a nuclear explosion—impossible in a nuclear reactor with its dilute, small masses of fissionable matter, when compared with the large, concentrated masses needed in a nuclear bomb. There is a fear of steam explosion; it got mighty hot in the reactor core at Three Mile Island, but no steam explosion happened; the containment held tight. There is fear of radiation-induced cancer and the other hypothetical effects of low level radiation. But in 20 years no one has been maimed or killed in a commercial reactor accident. Similarly, the United States atomic submarines have run for years with less radiation exposure to the sub crews than they would have gotten from living on the surface of the earth and being exposed to normal background radiation.

This is a good record. And when it's compared with the health costs of coal burning for electricity generation, nuclear power stands out even more as a safe way of generating electricity.

In 1977 alone, $1 billion was paid out to compensate miners or their widows for black lung disease. 139 coal miners were killed in accidents above or below ground; 14,794 miners were injured. And, of course, there is the loss of crop land to the safer strip mines.

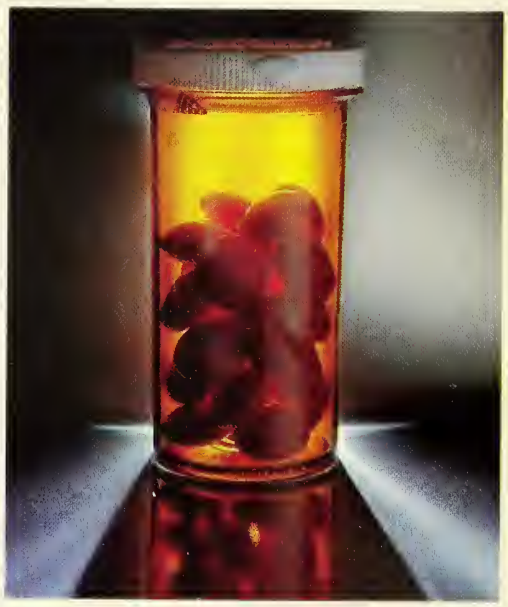
Electricity generated by nuclear reactors is cheaper—despite high construction costs, much of which go for super safeguards against a steam explosion, sabotage, or a melt-down of the reactor's nuclear core. Once built and in operation, the fuel cost for nuclear power is markedly less than for fossil fuels. And with breeders, the costs would be even less—if we could get a timorous President and a vote-conscious Congress to act favorably. Cost estimates show a savings of 10% to 15% with nuclear power, compared to coal-fired-steam production of electricity, if the nuclear power plants aren't overregulated to death.

Nuclear power is reliable. When the coal miners struck in the winter of 1977-1978, nuclear reactors supplied about 12% of our nation's electricity, although before they accounted for 9.5% of it.

The cost of burning coal is something that people bear in an industrialized society. But compared with nuclear power, it is a black and barbarous relic. A coal fired power plant each year results in from 48 to 285 times more deaths than does an equivalent nuclear-powered generating station and the mining and processing of uranium for it, according to a recent JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION article. Coal burning produces thousands of times the volume of waste that a nuclear power plant produces. And when we concern ourselves with radiation, let's not forget that burning coal releases radon 222 from the traces of radium 226 present in coal. The radon is released from the fly ash long after burning and produces a chain of radio-

CONTINUED ON PAGE 820

The Upjohn Company announces a new indication for Motrin®
(ibuprofen)



A well-tolerated, nonnarcotic prescription for pain



© 1979 The Upjohn Company

Motrin now proved an effective analgesic for mild to moderate pain

Motrin 400 mg provided greater relief of pain than did propoxyphene 65 mg in controlled clinical pain studies.

Time after drug administration (hour)		.5	1	2	3	4
Mean relief-of-pain scores* (No. patients reporting)	Motrin 400 mg ibuprofen	.89 (108)	1.25 (108)	1.36 (108)	1.28 (107)	1.19 (106)
	Darvon 65 mg propoxyphene	.66 (100)	.99 (99)	1.13 (96)	.99 (96)	.80 (96)
Statistical significance		$p<0.02$	$p<0.01$	$p<0.05$	$p<0.02$	$p<0.002$

*0 = No relief 1 = Partial relief 2 = Complete relief

Data on file at The Upjohn Company

Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

Motrin 400 mg TABLETS
ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

Upjohn

Motrin® (ibuprofen) now proved an effective analgesic for mild to moderate pain

Motrin® Tablets (ibuprofen, Upjohn)

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin:* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.
Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

Caution: Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

MED B-4-S

Upjohn THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

J-7280-4

August, 1979

ALDORIL®

containing methyldopa and hydrochlorothiazide

TABLETS
ALDORIL®-25
containing 250 mg ALDOMET® (Methyldopa, MSD)
and 25 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL®-15
containing 250 mg ALDOMET® (Methyldopa, MSD)
and 15 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL® D30
containing 500 mg ALDOMET® (Methyldopa, MSD)
and 30 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS
ALDORIL® D50
containing 500 mg ALDOMET® (Methyldopa, MSD)
and 50 mg HydroDIURIL® (Hydrochlorothiazide MSD)

Merck Sharp & Dohme, Division of
Merck & Co., Inc., West Point, PA 19486

MSD
MERCK SHARP & DOHME

Copyright © 1979 by Merck & Co., Inc

J9AR13

Guest Editorial

Chicken Little at Three Mile Island

L. A. ARATA, M.D.
Shelbyville

According to the old story, Chicken Little got struck on the head by a falling acorn. Big deal! If she had been struck by a falling coconut, the whole saga would not have been written. But, having been struck by the acorn, she rushed off in a bird-brained hysterical fit, and succeeded in causing self and bird-brained friends to become the center of attraction at a fowl dinner enjoyed by the fox.

Moral: Bird-brained behavior can be expected of bird-brained hysterical creatures.

I am reminded of the old story by the hysteria of recent months secondary to the happenings at Three Mile Island. A potentially serious incident occurred. Small amounts of radiation escaped into the environment (an *acorn* amount and not a *coconut* amount). Then came the *hysteria!* Stop nuclear power production, but object to higher prices for power generated by more expensive fuels! Stop nuclear power production until better ways are found to dispose of nuclear by-products!

If one forgets the hysteria for a moment, one can realize that the total amount of nuclear radiation in the world is steadily becoming less. Nuclear fission goes on whether the nuclear ores are in the mines, unmined, or in power plants or their wastes. Each nuclear element has its own half-life, and has had it since Day One of the earth. There must be less nuclear radiation in the world in 1979 than there was in 1779, or in 979 A.D., or in 1979 B.C., and so on back to Day One—whenever that was. Somehow, the earth and mankind have survived the higher levels of natural radiation that existed in earlier times.

The problem is that some radioactive elements have been concentrated into smaller spaces or in different places than they were in nature. Many other things are also in more concentrated spaces than they once were. All kinds of earthy products have been moved from their original locations—including crude oil, iron ore, the water of the Colorado River, ad nauseam. So, some uranium ore also has been moved. Big deal!

With all the anxiety about disposition of nuclear waste products, I suggest that they be moved back to the mine areas whence they came. Wouldn't that seem logical? If these radioactive minerals had been living their half-lives for the past millions of years in those locations, why would it be contamination to return some of them to their earlier sites?

Of course, the above is a simplified, logical (?) thought, and we should have learned that bird-brained hysteria, or human-brained hysteria, is not successfully combated by logic. If logic were a powerful force in determining our private and social actions, we would have eliminated fuel-consuming devices on our automobiles, and entombed many of our ecology freaks in the coal mines along with most of the Fuzzy Thinkers of Foggy Bottom. But, alas, I fear that Utopia and Shangri-La are not a part of U.S.A. 1979.

INDIANA MEDICAL BUREAU
1010 East 86th St.—72 Winterton
Indianapolis 46240
844-7933

A Licensed Employment Agency
Specializing in Medical Personnel

Our 27th Year of Service



AUXILIARY REPORT

Charlotte (Mrs. Abner P.) Bennett
President, ISMA Auxiliary

WANTED

Unaffiliated physicians' spouses to join medical auxiliary

Excellent opportunity to demonstrate common interest in spouse's profession and its concern with better health for fellow man. Side benefits: Sharing and enjoying companionship of people of like interests.

Doctor, we need your help.

If your spouse is not a member, why isn't she? Or, in ever increasing numbers, why isn't *he?*

Sometimes the old cliches persist, and the Auxiliary may seem to be just another social organization. It isn't! It's an organization that shares your concerns for the provision of quality health care. Think of it . . . Who besides you pushes immunization, cardio-pulmonary resuscitation, health screening programs, health programs for aging, etc.?

Do you know that, in one year alone, Auxiliary members worked on

- 606 programs for the aging
- 272 health careers projects
- 329 immunization programs
- 107 emergency medical care programs
- 129 safety programs, plus countless more activities?

Do you know that we've provided major community health projects, sat on the executive committees of national voluntary organizations and worked with our medical societies on urgent health care issues?

But we have just touched the tip of the proverbial iceberg. We can do much more—but we need your spouse to help us.

And doctor, we can help you, too. Our Auxiliary members are actively engaged in furthering legislation that will help you practice the kind of medicine you want. We have asked our members to attend Health Systems Agency meetings in their communities so they can become acquainted firsthand with specific issues that come before them. If they hear something they feel is medically important, they have been asked to inform the ISMA. So you see, we hope to function as an extra set of eyes and ears for the medical association.

Our "Legs Alert" program can marshal a large number of auxilians who quickly make the AMA's views on specific issues known to our legislators.

These are some of the reasons why we need your spouses. We will welcome them as members at large or as new members of organized auxiliaries. Often all it takes is a request from you that she/he join us. You can even make it easier by sending in that check to cover county, state and national dues. Even if you don't have the time to be an active Association member, see that your spouse joins us. Our members are well informed and often are the ones who bring home information pertinent to your practice of medicine.

If you are an involved ISMA member, become even more committed by enrolling your spouse in the Auxiliary.

There is also another way in which you can help us! If there are two or more ISMA Auxiliary members at large in your county, suggest that they become an organized county auxiliary. A medical auxiliary can be a "plus" when trying to attract new physicians to your area. We provide an immediate welcoming group—instant companionship, help and community orientation. Our membership enables us to increase our services to people, and increasing our services enables us to attract more members.

Help us to help you. . . .

easy to take







Keflex®
cephalexin

Lilly

Additional information available to the profession on request.
Eli Lilly and Company
Indianapolis, Indiana 46206

500738

The American Dream: A Nightmare?



Otis R. Bowen, M.D.
Governor
State of Indiana

(Following is an abstract of the text delivered by Governor Otis R. Bowen, M.D., during the annual meeting of the Second District Medical Society, conducted in Sullivan, Ind., Sept. 13.)

There is a growing discussion, in the media and among ourselves, as to whether the American dream has become a nightmare. Nothing seems to go right or work right anymore. No one seems to take what anyone says at face value. There seem to be few people in whom we are willing to place trust or to whom we accord respect these days.

President Carter called this phenomenon a crisis in confidence after his Camp David talks, in which I participated.

Many commentators have echoed that idea, suggesting that as a people we have lost our vision about what our country ought to be and confidence in our ability to make it what we want it to be.

I respectfully disagree with the President and with those analysts who preach the doctrine of despair.

I do not believe the American people have lost confidence in themselves. Instead, I believe they have lost confidence in the ability of our system, and its institutions, to respond to their real needs.

There has been little change in the values that have sustained us as a people for so long. There is evidence that those traditional values continue to guide us today.

Those who have created our lack of confidence in our institutions, particularly the federal government and the Congress, have done so by trying to move us too far from those underlying values.

A long time age, Alexis de Tocqueville suggested that Americans invented the concept of individualism and he suggested that this concept represented a departure from the self-centeredness and selfishness of other societies.

Because we placed high value on individuality, we also committed ourselves as a people to the concepts of freedom and achievement. It is rather obvious that the only way to allow assertion of individualism is to have the freedom to choose how one is to live and behave. Any judgments about how individuals exercise that freedom, in our society, also came to be based on an individual level. Achievement was a goal, and work and creative effort were the avenues by which one could reach that goal.

Moreover, as a people we also espoused equality and have interpreted that to mean equality of opportunity rather than equality of results. This was so because it also is fairly obvious that some individuals work harder, or possess better mental equipment, and therefore attain more.

Because the possession of property became a way in which individuals could define their niche in life and find protection of their expressions of individuality, we also adopted the European concepts of private property and the right to privacy within our individually owned enclaves.

These values ultimately came together in another, more general, but highly motivational concept that we could label progress. The notion of progress has been a theme that runs through all the years of our nationhood, and it has sustained us in good times and bad. We came to believe, because of this concept, that tomorrow is likely to be better than today, no matter how good or bad today is.

I see little evidence today that Americans have abandoned these values. We have seen some change in American lifestyles, in terms of growing consensus that each individual ought to be free to express his individual tastes and live as he wishes without fear of sanctions by the society in which he lives. Even this change, however, seems rooted in our commitment to the con-

CONTINUED ON PAGE 818

Management Problems?
Your CPA can help.

A Certified Public Accountant can provide specialized advice and service in many areas: internal cash controls, billing and collection procedures, analysis of expenditures, budgeting and income forecasting, plus numerous other business considerations.

As a professional who gives advice, you know the value of seeking professional advice. Consult a CPA for solutions to many of your practice's management problems.



Certified Public Accountants
perform the full range of accounting services

CPA
More than a title, it's a profession

Indiana Association of Certified Public Accountants, Inc.
921 E. 86th Street, Suite 102, Indianapolis, Indiana 46240, 317-257-6284

American Dream . . .

CONTINUED FROM PAGE 816

cept of the importance of the individual.

Many individuals interpret the proliferation of narrowly focused, politically active special interest groups as an indication that our nation is slipping toward self-centeredness. This was a central theme in President Carter's speech after Camp David.

But I believe this is not the case. Even the single-issue groups, whatever their thrust, seem to be saying only that the mechanisms of government are not addressing the right questions. Given that premise, these groups decide to take on a single issue and through the political process to at least *set it right*.

As I talk to people who are not activists and who hold to our traditional value system, I find them mostly concerned that we have allowed ourselves to get too far from what America is all about. They believe we need to recommit ourselves to traditional values.

Increasingly in a period of rampant inflation and economic stress, they tend to focus on the economic side of our value system.

They believe that someone who works harder than others, and achieves more, should be able to enjoy the fruits of that effort and success. They believe equality of opportunity should apply to all.

To the extent that they see stagnation and a no-growth situation, they suggest that we get back to the concept of progress, to a dynamic and expanding kind of progress that can benefit both the weakest and the strongest among us.

I have the feeling that many of the structures built within government since the Depression may crumble. They may crumble as a result of our people, trying to reassert our basic values, deciding what is necessary and proper and what is *not*.

A political leader who is able to tie into our peculiarly American value system may well be able to command confidence and inspire us to courses of national action that address our needs.

As a people, we do need a consensus—a political consensus, if you will—about *where* we want to go and *how* we intend to get there. It is not easy to develop such a consensus. It must closely relate to our value systems. It cannot engage in scapegoating. It must make the governmental mechanisms, by which we enforce our value system, work again.

If, and when, we find such a consensus, then faith in our collective tomorrows also will return and we again will be well!



Forget Everything

you ever knew about borrowing

And remember:

THE PROFESSIONAL

sa unique that we have aver $5,000,000.00 in personal loans made ta Physicians and Dentists.

Unique Features...

- **PAY ANY AMOUNT ANY DAY OF THE MONTH.**
 In good times, pay more. During slow periods, pay the minimum.
- **WE MAKE HOUSE CALLS.**
 A collect call is all that's necessary to begin processing your loan. We will come to your home, office or hospital to close your loan at your convenience.

This confidential loan is made for any good purpose . . . long term or short . . . $10,000 to $50,000. An interest-bearing loan, it can be repaid in varying amounts and on any day. You pay only for the time you use the money. Call today.

PROFESSIONAL LOAN DIVISION
Ask for Rod B. Hervey
Assistant Vice President
110 East Washington Street
Indianapolis, Indiana 46204
Phone (317) 631-1311

Indianapolis Morris Plan

ONE OF OUR BEST MEDICINES IS



Another one is experience. Those two things, together with exceptional staff, outstanding facilities and value, are the reason why so many people trust the name Americana.

Americana Healthcare Center

1345 N. Madison Ave. / Anderson, IN 46011 / (317) 644-2888
343 S. Nappanee St. / Elkhart, IN 46514 / (219) 293-2544
5600 E. 16th St. / Indianapolis, IN 46218 / (317) 356-0911
2010 N. Capitol Ave. / Indianapolis, IN 46202 / (317) 924-5821
8350 Naab Rd. / Indianapolis, IN 46260 / (317) 297-4111
3518 S. Lafountain St. / Kokomo, IN 46901 / (317) 453-4666
2201 Cason St. / Lafayette, IN 47904 / (317) 447-4102

Open Visiting Hours / Approved for Medicare

Americana. The nursing care for people who care about quality.

Split Atoms . . .

CONTINUED FROM PAGE 808

active daughter nuclides.

Atomic waste is more manageable than coal-fired boiler waste, mainly because there is so much less of it, but also because it can be isolated, sealed and buried.

The much attacked Rasmussen Report estimated that an accident of the worst kind—that would quickly kill 3,300 people, cause radiation injuries to another 45,000 people and require decontamination of several thousand square miles, from an enormous steam explosion in the reactor—would occur once in a billion reactor years. With 1,000 reactors in operation, such accidents would be a million years apart. Such science fiction is acceptable. We accept deaths of more than 40,000 people a year on our highways in the United States. We take steps to make driving safer, but we don't live in fear over our driving records.

Although the critics raise many objections to the Rasmussen Report, the new reports, like the Lewis Report, don't sound new alarms or come up with significantly different calculations of risk. The authors of the Lewis Report are more concerned with the techniques of calculation in the Rasmussen Report, than the resulting estimates of safety.

The construction of nuclear generating stations and their operation also provide jobs; we Hoosiers should encourage the construction of the Marble Hill Nuclear Generating Station on the Ohio River at Madison, Indiana, and the Bailly Nuclear Station in northern Indiana, at Dunes Acres. They shouldn't be obstructed. There's room for more in Indiana; we have plenty of rivers to cool the steam from these reactors. We're 97% dependent on coal for our electricity in Indiana now, and that creates problems.

The Japanese and the French are forging ahead with nuclear programs, including breeder reactors. They don't want their futures to be controlled by high priced energy or the dictates from oil exporting countries. We can learn from them.

Why we Americans can't cut through this hysterical nonsense and go ahead with the production of clean, cheap, safe nuclear power when we need more of it every year, is incomprehensible to me. The philosophy of the opponents of nuclear reactors seems to be summed up in the slogan, "Split Wood, Not Atoms."

It doesn't take much thought for most of us to decide that we'd rather split atoms and move forward, than go backwards.

Quinamm™

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS: For the prevention and treatment of nocturnal recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis, and static foot deformities.

CONTRAINDICATIONS: Because of the quinine content, Quinamm is contraindicated in women of childbearing potential, in pregnancy, in patients with known quinine sensitivity, and in patients with glucose-6-phosphate dehydrogenase deficiency. Hemolysis (with the potential for hemolytic anemia) has been associated with a G-6-PD deficiency in patients taking quinine.

PRECAUTIONS: Thrombocytopenic purpura may follow the administration of quinine in highly sensitive patients. Recovery will follow withdrawal of the medication.
Cinchona alkaloids, including quinine, have the potential to depress the hepatic enzyme system that synthesizes the vitamin K-dependent factors. The resulting hypoprothrombinemic effect may enhance the action of warfarin and other oral anticoagulants.

ADVERSE REACTIONS: Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. If ringing in the ears, deafness, skin rash, or visual disturbances occur, the drug should be discontinued

DOSAGE AND ADMINISTRATION:
1 tablet upon retiring. When necessary, 1 additional tablet may be taken following the evening meal.

Product Information as of September, 1977

U.S. Patent 2,985,558

Merrell

MERRELL-NATIONAL LABORATORIES Inc.
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®



8-3305 (Y371A)

for Knotts in the night



Quinamm™

each tablet contains quinine sulfate 260 mg., aminophylline 195 mg.

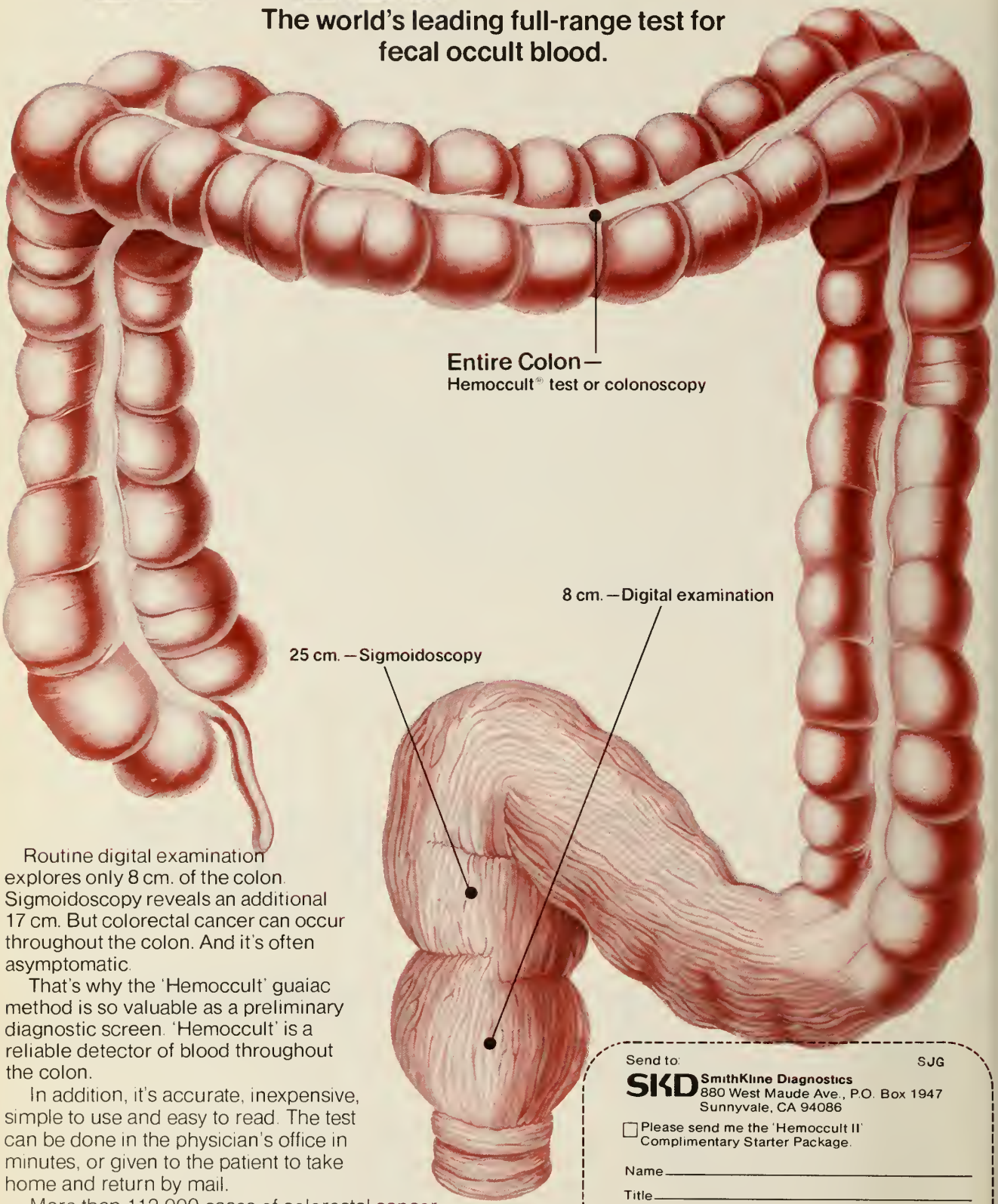
specific therapy for painful night leg cramps

Nocturnal recumbency leg muscle cramping is frequently an unwelcome bedfellow for many patients—especially those with arthritis, diabetes or peripheral vascular disease... consider Quinamm... simple, convenient dosage—usually just one tablet at bedtime... can provide restful, welcome sleep without night leg cramps.

See opposite page for prescribing information.

Hemoccult®

The world's leading full-range test for fecal occult blood.



Routine digital examination explores only 8 cm. of the colon. Sigmoidoscopy reveals an additional 17 cm. But colorectal cancer can occur throughout the colon. And it's often asymptomatic.

That's why the 'Hemoccult' guaiac method is so valuable as a preliminary diagnostic screen. 'Hemoccult' is a reliable detector of blood throughout the colon.

In addition, it's accurate, inexpensive, simple to use and easy to read. The test can be done in the physician's office in minutes, or given to the patient to take home and return by mail.

More than 112,000 cases of colorectal cancer will occur in the United States this year. The earlier they are diagnosed, the greater the chances for successful treatment.

'Hemoccult' is available through local distributors, nationwide.

Send to: SJG

SKD SmithKline Diagnostics
880 West Maude Ave., P.O. Box 1947
Sunnyvale, CA 94086

☐ Please send me the 'Hemoccult II' Complimentary Starter Package.

Name_____

Title_____

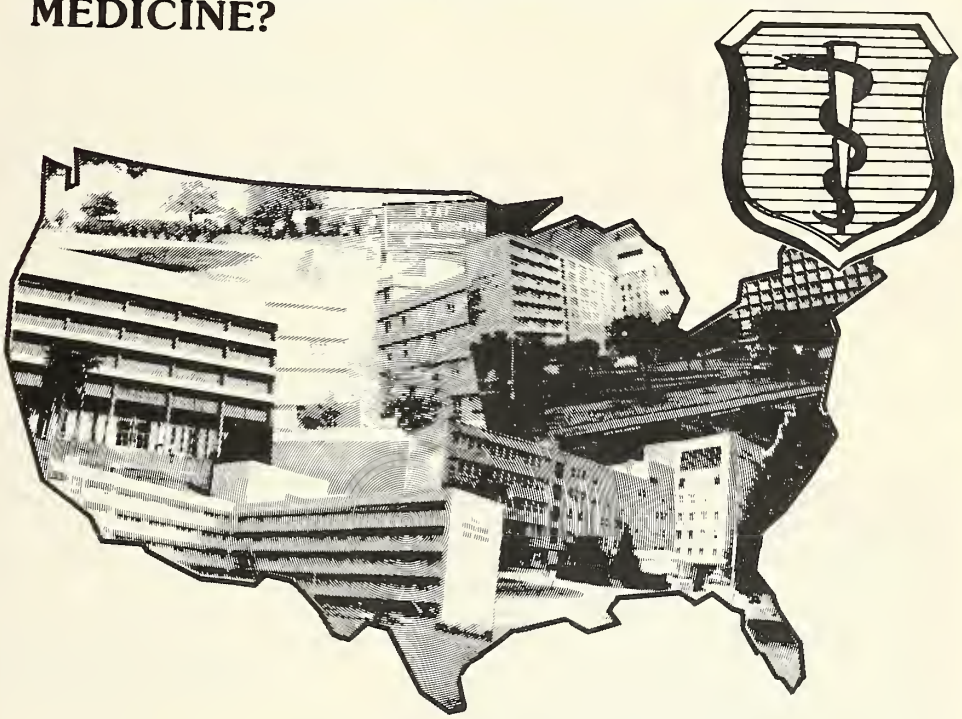
Institution_____

Address_____

City_____ State_____ Zip_____

Phone_____

WHERE WOULD YOU LIKE TO PRACTICE MEDICINE?



THE AIR FORCE WILL DO ITS BEST TO ASSIGN YOU THERE.

Germany or Little Rock — Alaska or Tucson, Arizona — whatever your geographical preference, we'll work to place you there. And you'll know the assignment before you are committed.

This is just one of the many advantages for physicians in Air Force medicine. We also provide excellent salaries, 30 days of paid vacation each year; and for qualified physicians, an opportunity to train in a specialty area. Most importantly, we provide an environment in which you can practice medicine. And the support to eliminate your involvement in paperwork.

We would like to tell you more about Air Force medicine. Contact the nearest Air Force medical recruiter or call 1-800-523-5000 (800-362-5696 in Pennsylvania). We'll answer your questions promptly and without obligation.

Contact Captain Sam Redding
or MSgt Bob Reese
3919 Meadows Drive
Indianapolis, Ind. 46205
Phone: (317) 269-6164 Collect

AIR FORCE

A great way of life.

THE SCALPEL AND THE PEN

ALEXIS CARREL
1873-1944

Writer
Surgeon
Philosopher
Mystic



Reprinted by permission from TIME, The Weekly Newsmagazine; Copyright Time Inc. 1935.

"Science is the search for truth . . . We need to have the spirit of science in international affairs . . .".
LINUS PAULING (1958)

RODNEY A. MANNION, M.D.
LaPorte

ALTHOUGH HIS REPUTATION as a writer rests largely on the sociological best seller of 1935, "Man the Unknown," this doctor is firmly in the galaxy of literary medical men and was featured on the cover of TIME that same year. Ten years later a cloak of silence, which has continued partly to this day, began to envelop his reputation. Nevertheless, an examination of his marvelous scientific accomplishments leaves no doubt of his eminence. His history is interesting and unique.

He was a French doctor who chose to work in America as an experimental surgeon and pioneered in diverse fields such as blood vessel anastomosis, organ transplantation, intrathoracic surgery, replacement of amputated extremities, extracorporeal circulation, tissue cultures and metabolism of cancer cells.

Much of what is considered modern surgery was originated by this man before 1910. The experiments with vessel anastomoses (he took his associate's suggestion to use all layers of the vessel wall in very fine interrupted sutures) won him the Nobel Prize for medicine or biology in 1912.

This man was an original thinker but some think also a theatrical poseur (he used only black gowns " . . . to save the eyes from glare . . ." and arrived at the Rockefeller Institute's cafeteria for luncheon so attired). Yet he deserves a place in the scientific pantheon among his countrymen, Pasteur and Bernard. That he is not usually accorded such a lofty niche stems partly from imprecations of Fascist collaboration during his last years in occupied Paris under the Vichy regime.

Whatever the truth of this alleged connection with the Petain government, nonetheless his early experiments were precocious and became the keystone of today's surgery. A perusal of his life shows not so much a Fascist leaning as a romantic egoist belief in the perfectibility of mankind (and Alexis Carrel!). Even some of his social dictums might be of use in today's chaotic and changing world. A quotation from unpublished work in the Georgetown University collection of his effects defines succinctly his position regarding mankind:

"The scientific method . . . does not reach timeless things . . . Our techniques are incapable of measuring vanity, hatred, love, beauty, the dreams of the scientist, the inspiration of the poet, the elevation of the soul toward God. *Nevertheless, scientific thinking has the power to deal with these elusive things* [Italics added] . . .man in his entirety is located within the jurisdiction of scientific thought."[1]

When stated flatly, as does Carrel, that the spiritual factors of humanity are under the purview of science, he stands accused of naive and fatuous braggadocio. And yet, what of our modern needs in psychiatry; of civilization's imperative to conserve and produce beauty (witness the faceless ersatz Utopia as, say, in Soviet cities); or, on the mundane plane the need of a child to be raised with values beyond the merely physical? In other words, can science absorb religion and allow man to progress to what a thinking person would consider man's natural potential while retaining some of the advantages of the old philosophy? Carrel believed this concept with his whole heart.

He was born in the upper middle class of a small town near Lyon, France in the French Midi. Although christened Auguste he assumed his father's name Alexis at the age of four after his father died of pneumonia. He doted on his mother, and she dominated and spoiled him in his early years. In young manhood he underwent a depressive "dark night of the soul," which was surely, as we would judge today, related to repressed psychosexual feelings. Although he married in 1913 (when he was 40) he remained in many ways a personal and solitary human being. A quaint theory of his late years, as he mentioned in "Man the Unknown," concerned the concept of increased intellectual power from sexual suppression—while affirming the need to be hypersexed to have great intelligence at all. Thus he said: "A workman's wife can request the services of her husband every day. But the wife of an artist or of a philosopher had not the right to do so as often."[2] Perhaps this will explain to the reader the paucity of philosophers in modern society.



'Man the Unknown'

The method of medical training in France withholds the doctorate degree until a body of postgraduate work and a thesis has been submitted, so it was 1900 before Carrel was graduated as an M.D. Perhaps partly because of his outspoken criticism of French medicine as hidebound and overly conservative, he failed to obtain a prime position in academic surgery at the hospital in Lyon. Thus, he was suscepti-

Graphic illustrations provided by Mrs. Walter J. Krause.



Lourdes and science

ble when he was asked to teach rudimentary medicine to a man who was going to ranch and homestead in Canada. He was, however, beginning his earliest experiments in blood vessel anastomosis at that time, for when he arrived in Montreal in 1904 the surgeons there knew of his published work.

After less than two years at the Hull Laboratory at the University of Chicago, in 1906 he accepted a position in New York at the Rockefeller Institute, then headed by the renowned Simon Flexner. His work there was seminal in vascular surgery, as his bibliography[3] shows so directly. He was surprised when he was honored with the Nobel prize in 1912 but annoyed that he was required to journey by boat to Oslo in December and would lose many a day of work at the Department of Experimental Surgery, as his baliwick at the Institute was called.

Carrel's life is a bellwether of surgical scientific advance in the 20th Century. He always spent the summer months in France where he revisited Lourdes (he had a few authenticated miraculous cures documented), spent some weeks at his mother's old estate and renewed his acquaintanceship of the medical community at Lyon. So he was at Anjou when he, as a French citizen, received his mobilization orders in August 1914.

He immediately immersed himself in the study of wound healing and, after many misadventures with the French military authorities, found himself in charge of a hospital and laboratory at Campiegne, between Paris and the front lines. Here, working with the English chemist, Henry Dakin, he developed the Carrel-Dakin method of wound irrigation. Dakin, of course, devised the dilute hypochlorite fluid, which was irrigated through multiple tubes into the depths of mutilated and devitalized shrapnel wounds. This was eventually made standard treatment in Allied hospitals but not before many acrimonious confrontations ensued with the French medical establishment.[4] The procedure is still a good one for contaminated wounds but has been largely superseded by antibiotic therapy in peacetime. Almoth Wright, Alexander Fleming's chief, was a bitter critic of all antiseptics and was even loath to accept Fleming's "antibiotic" in 1928—Penicillium notatum. Cultures also became negative after a few weeks of the Carrel-Dakin treatment.

In 1922 the Carrels (Mrs. Carrel, of the minor French aristocracy, was a widow whose husband died in 1909, leaving her with a small son) bought the island of St. Gildas off the coast of Brittany. There, in solitude and isolation, among pre-Christian and medieval relics, he would spend most of his summers. In later years Charles Lindbergh, who worked out the problem of a cardiac pump oxygenator at the Rockefeller Institute for Carrel, bought the adjoining island called St. Illiec. Each island and the mainland could be visited on foot only at low tide. The Germans eventually occupied St. Illiec during World War II.

Lindbergh's association with Carrel is unique. Only three years after his transatlantic flight, he volunteered to construct a perfusion pump. Carrel's reputation was at this time of the highest, and Lindberg became an unpaid worker in his laboratory. Eventually, Lind-

bergh was successful, and both master and apprentice appeared on the cover of TIME magazine July 1, 1935; the cover also depicted their "mechanical heart." They published a book in 1938, "The Culture of Organs," and a connective tissue culture from a chicken's heart was a prominent exhibit at the New York World's Fair in 1939.

So over the years between the great wars Carrel gradually moved his primary scientific interest away from surgery to physiology. They kept a huge "mousery" with more than 50,000 mice at the Rockefeller Institute to study environmental causes of cancer. This was only partly successful as research, but the "chicken heart" culture was kept alive for 34 years. Many organs were "cultured" over the years—Fallopian tubes, ovaries, kidneys and so on. Experimenters have, of course, since preferred examining organs *in situ* and the concept of "culture" of organs is now outmoded. Gradually, Carrel became more the philosopher and mystic. His friends encouraged him and he wrote "Man the Unknown," which embodied most of his sociological ideas under one cover.

This is a curious volume and in large part is responsible for Carrel's Fascist label. In it he advocates using the whip to punish petty criminals, suggests that women are only in their natural element in feminine roles of motherhood and the home, and expressed his concepts of proper and "natural" sexuality. His basic sociological and philosophical premises coincide with those of Jacques Maritain, the French Neo-Thomist. Briefly stated, it assumes that man can reach his full human stature only by pursuing natural ends (by practicing self-denial) and that man is perfectly able to perceive what is natural if the decaying effect of modern life, such as the mass media, antic and hectic movement as with automobiles in the city, industrial pollution and so on, are removed from man's environment. To accomplish this, he suggested an "Iatrocracy"—government by a body of highly trained medical geniuses.

Carrel always had the highest disdain for specialists who would venture opinions in other fields—such as a physicist proclaiming agnostic ideas or pontificating on social behavior. Of course, he ate of the forbidden fruit of the diletante with no hesitation himself. And so



Lindbergh and Carrel on St. Illiec

can be seen his flawed and overpowering ego. His book was reviewed in LANCET and it was stated that "Man the Unknown" revealed more about Alexis Carrel than about "Man." Nonetheless, it was translated into 19 languages and sold 900,000 copies. The theme of the book was that it is now possible for science to define civilization's decay and at the same time be capable of effecting counter measures so as to escape the decline common to all previous civilizations. It must be said that he felt only an authoritarian elite would be courageous and decisive enough to succeed. Thus began the totalitarian aspersion toward him.

He had offended many conventional scientists with his ideas of mysticism and clairvoyance and his general stentorian criticism of his opponents. Perhaps also his best original work was behind him, for in 1939 the Board of the Rockefeller Institute insisted upon his mandatory retirement at age 65. This rebuff stung Carrel deeply, and he repaired to France rather than keep a small laboratory in New York without his status as Chief of the Experimental Surgery Department. So again he was in France when Germany invaded Poland and France declared war. Less than seven months later, France accepted the German conditions for an armistice and the Vichy government was established as a puppet regime.

Up to this point, Carrel can be seen as a right thinking, though headstrong and egocentric, man of genius. Now he stayed in France and met for several hours with General Petain

in March 1941. By June the government agreed to subsidize his Insitute of Man called the *"Foundation Francaise pour l'Etude des Problems Humains."* Then he tried to put into effect what had previously been mere theories in his writings. The "Foundation" began demological studies on children who were genetically desired and the means to increase their number, on the psychology of work, prevention of early aging in workers and later parapsychological experiments (Madam Carrel's influence). On St. Gildas he finished what was to be his posthumous work, "The Conduct of Life," wherein he again espoused elitist principles and behavior modification. At no point did he accept bounty, such as fuel or food, from the Germans; indeed, he was scrupulously nonpolitical. It seems, though, that he was tolerated as a potential tool of the Fascists, and his pet theories fitted well the nefarious ends of France's oppressors.

To assess Carrell on balance, it is necessary finally to consider the origins and importance of his philosophy. It appears much related to the Existentialism of Thomas Aquinas as perceived and developed by Jacques Maritain.

To paraphrase the Encyclopedia Britannica[5] regarding Maritain, the following covers his point of view, simply stated:

1. Science, poetry, philosophy and mysticism are all ways of knowing reality.
2. The person transcends the political community.
3. Natural law expresses nature and is known naturally by mankind.
4. Moral philosophy must be acquired with the other sciences.
5. A pluralistic society must work together for the betterment of mankind.

Although Carrel disavowed Maritain, it seems that now, more than 30 years later, Carrel owes much to that philosopher. Where Carrel might have lost sight of the greater reality concerns the ascendancy of the individual person over society as a whole. It is a difficult point and one that Maritain has written many lectures and even volumes to clarify. Certainly the Communists, let alone the Fascists, have failed to understand the relation of each man to society. So perhaps it is puerile to blame Carrel for such a failure. On almost every other significant point Carrel is a hammer hitting the nail firmly in the center. We, as physicians, can be grateful to have had such a man as our medical ancestor. He attempted to be a Messianic harbinger of good conduct for us—that he failed by a short margin is, in some manner, to his credit.

"The splendid achievements of the intellect, like the soul, are everlasting."

SALLUST (86-34 B.C.)

BIBLIOGRAPHY

1. Durkin, J.T., S.J.: Alexis Carrel on Man and Society.
2. Man the Unknown by Alexis Carrel, Harper and Bros., New York, 1935.
3. Carrel, A. and Guthrie, C.C.: The Transplantation of Veins and Organs, Am. Med. 10:1101, 1905.
4. Alexis Carrel, Visionary Surgeon, by W. Sterling Edwards, M.D., and Peter D. Edwards, Chas. Thomas, Springfield, Ill., 1974.
5. Encyclopedia Britannica, Micropedia, Vol. VI, p. 630, 1974.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

WHAT'S NEW?

CONTINUED FROM PAGE 804

A NEW BREATH TEST UNIT has been developed by a Dutch manufacturer of medical instruments for use in measuring the hydrogen content of expiratory air and thereby detecting abnormalities in the intestinal breakdown and/or absorption of carbohydrates. It will be useful in diagnosing lactose intolerance and pancreatic deficiency.

PRO SERVICES, INC., Flourtown, Pa., has launched a new no-load mutual fund capitalizing on the revolution occurring in the world's health care industry. Called "Medical Technology Fund, Inc.," it will deal in securities of medical technology companies in diagnostic, preventive, therapeutic, administrative and supportive fields.

THE FDA has approved marketing of Motrin (ibuprofen) for indications other than rheumatoid arthritis and osteoarthritis. The new uses include menstrual pain, postextraction dental pain, postoperative pain and musculoskeletal pain such as that caused by soft tissue athletic injuries.

IN BOOKS . . .

CROWN PUBLISHERS have released "Coping with Chronic Pain" by Nelson H. Hendler, M.D. and Judith Alsofrom Fenton. Written for general reading, it dismisses the many myths about chronic pain and provides sound advice for the sufferer, his family and friends. The price is $10.

DOUBLEDAY has released "Explorers of The Body" by Steven Lehrer. It is a history of medicine told through lively stories of the men and women who made the great breakthroughs from the Ebers Papyrus to the latest dope on drug-resistant bacteria. 463 pages, $12.95.

THOMAS Y. CROWELL, PUBLISHERS, have just released "The Courage to Live." It is written by Dr. Ari Kiev to counsel patients, friends, relatives and physicians on depressed and suicidal patients. Dr. Kiev has, for 15 years, been associated with the Crisis Intervention Center of New York Hospital and has treated approximately 2,000 such patients. The price is $7.95.

E. P. DUTTON is releasing "Kids and Booze: What You Must Know To Help Them," by Wilbur Cross, a recovered alcoholic who has written more than a dozen books. The work is referred to as the essential handbook needed to come to grips with teenage alcoholism. $10.95 in hard cover, $5.95 in soft cover.

Librax®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br

Please consult complete prescribing information, a summary of which follows:

Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl/Roche) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.**

As with all anticholinergics, inhibition of lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially, increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated, avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema; minor menstrual irregularities; nausea and constipation; extrapyramidal symptoms; increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis); jaundice; hepatic dysfunction reported occasionally with chlordiazepoxide HCl; making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, *i.e.*: dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

Roche Products Inc.
Manati, Puerto Rico 00701

In irritable bowel syndrome*



Adjunctive

Librax®

Each capsule contains
5 mg chlordiazepoxide HCl (LIBRIUM®)
and 2.5 mg clidinium Br (QUARZAN®).

antianxiety/antispasmodic/antimotility

ROCHE

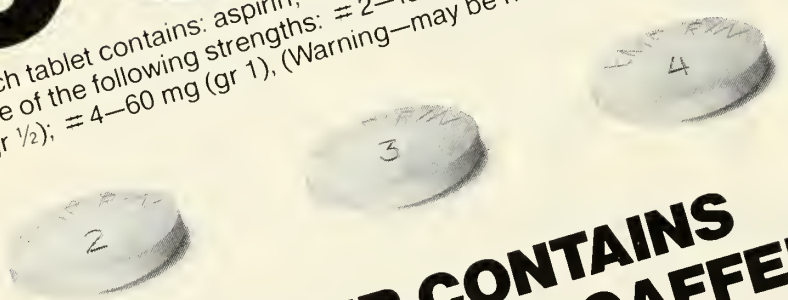
*Librax has been evaluated as possibly effective for this indication.
Please see brief summary of prescribing information on preceding page.

~~EMPIRIN®~~
~~COMPOUND~~
~~C CODEINE~~
IS NOW

EMPIRIN®
C CODEINE



Each tablet contains: aspirin, 325 mg; plus codeine phosphate in one of the following strengths: = 2—15 mg (gr ¼); = 3—30 mg (gr ½); = 4—60 mg (gr 1), (Warning—may be habit-forming)



NO LONGER CONTAINS PHENACETIN OR CAFFEINE.

Wellcome | **Burroughs Wellcome Co.**
Research Triangle Park
North Carolina 27709

THE JOURNAL, in cooperation with the Division of Continuing Medical Education of the Indiana University School of Medicine, offers its readers a Continuing Medical Education program. This is the 22nd in a series of CME articles produced by the faculty of the School of Medicine and is supported by a grant from its Division of Continuing Medical Education.

As an organization accredited for continuing medical education, the Indiana University School of Medicine certifies that this continuing medical education activity meets the criteria for 1 credit hour in Category I for the Physician Recognition Award of the American Medical Association provided it is used and completed as designed.

To obtain Category I credit, complete the quiz on Page 855.



Scoliosis and the Family Physician

G. PAUL DeROSA, M.D.
Indianapolis

SPINAL DEFORMITY was one of the most neglected areas of orthopedics during the first half of this century. Now, however, there appears to be a "rebound phenomenon!"

During the past 25 years, tremendous advancements have been made in the care of the scoliotic patient. New ideas, new orthoses (braces), and newer surgical techniques have led to a better care of advanced deformities and prevention of lesser ones.

In spite of these many advances, the underlying disease process has not ceased, and in fact there may actually be an increase in the number of patients with spinal deformities.

The purpose of this communication is twofold: 1) to review some basic facts and features of scoliosis; and 2) to stress early detection by standardized school screening programs.

Scoliosis has been called a "side to side curvature of the spine." In reality, it is a more complicated deformity, characterized by both lateral curvature of the spine and rotation of the vertebrae. Because of the vertebral rotation, the attached rib cage on the convex side of the curve rotates posteriorly, whereas those ribs on the concave side of the curve rotate anteriorly and crowd together. This rotation accounts for the apparent discrepancy in breast size in the adolescent girl with significant spinal curvature. In actuality, the breast tissue is usually of similar size, but the underlying ribs on the flattened side make the breast appear smaller. Viewed from behind, the rotated ribs cause a

The author is Associate Professor, Pediatric Orthopedic Surgery, Indiana University School of Medicine, Indianapolis.

- ***Examining for Scoliosis***
- ***Measuring the Curve***
- ***Treating Scoliosis***
- ***Screening at Schools***

prominence of the scapula on the convex side of the curve, producing the so-called hunchback deformity of scoliosis, best seen in the forward bending position.

In addition to rib rotation, scoliosis may cause pathologic changes in the vertebrae and intervertebral discs. The disc spaces themselves become narrowed on the concave side of the curve with a shift of the nucleus pulposus toward the convex side. The growing vertebrae respond to unequal pressure loads across their bodies by asymmetrical vertebral growth, thus accounting for the wedging of the vertebrae nearest the apex of the spinal curve.

CLASSIFICATION, ETIOLOGY

The broadest categories of scoliosis are *nonstructural* and *structural* scoliosis. Nonstructural scoliotic curves are extremely flexible and reveal correction upon side bending of the patient toward the convex side of the curve; in structural scoliosis, the curve fails to correct upon such side bending, and is therefore quite rigid. The *table* gives a more comprehensive etiologic classification.[5]

After a careful history and physical examination, most scoliosis presenting to the family physician will probably be categorized as being "idiopathic," that is, the true etiology remains obscure. If, however, we look closely at these patients and their families, we find that a great number of the families will give a history of curves in other family members, so-called familial scoliosis or genetic scoliosis. If a family has one child with a curvature of the spine, then all the children in that family must be examined and observed throughout their growth period for the occurrence of scoliosis. Counseling of parents and of the patient must be routine.

Our current understanding of familial or genetic scoliosis indicates that it may be a sex-linked trait with incomplete penetrance and variable expressivity, or as Cowell has stated, it may be autosomal dominant in its genetics.[3] At any rate, workers in this field are continuing their search for the mode of transmission of this type of scoliosis. Based upon our present knowledge, however, we can state that a person who has scoliosis has a one in three chance of having children with scoliosis.

Depending upon the age at the time of recognition of the curve, familial scoliosis is designated as infantile (if less than 3 years of age at onset), juvenile (3 to 8 years age at onset), or adolescent scoliosis (9 years of age to maturity).

In the United States, the most common form of idiopathic scoliosis is the adolescent onset variety, that is, the child age 10 to 14 just prior to the last rapid growth spurt. It is in this group of children that school screening is most rewarding. To make the diagnosis of any condition, one must first think of the disease process, and then perform careful examinations of all patients.

The overall incidence of scoliosis is variously quoted in the orthopaedic literature as being 4-8% of the normal population. This is a very large number of people. Not all of these people, however, need active treatment, because not all scoliotic curves are progressive. Only about 2% of the population have progressive spinal curves requiring active treatment.

It is of major importance that all children be screened for scoliosis at each examination by the family physician. Each routine visit, each preschool physical is an opportunity for the physician to take the time needed to examine the spine for malalignment. The examination requires only about 30 seconds, but if properly performed may yield a lifetime of dividends. In the neonatal period, the exam is performed both in the prone position and with the child suspended. In all ambulatory children, the examination should be performed in the standing position.

THE EXAMINATION

Observe from the back. Careful attention is placed on the following areas:

- Are the shoulders of unequal height?
- Is there an obvious curve of the spine or the spinous processes?
- Is there a prominent scapula?
- Are there asymmetrical waist creases?
- Is there a tilt of the pelvis or unequal leg length?
- Does one arm hang away from the trunk farther than the other?

The patient should then bend forward, as if touching his toes, and the spinal alignment is checked in the "forward bending" position. Both sides of the thorax should be

at the same level in forward bending. If they are not, then there is a scoliosis present. These simple observations can satisfactorily screen out most scoliotic curves. If there is any concern that any of the above are present, then an x-ray of the spine should be obtained in the standing position. The film should include the vertebral column in its entirety, from occiput to sacrum.

MEASUREMENT OF THE CURVE

The severity of the scoliotic curve (*Figure 1*) is determined by careful measurement of the spinal x-ray. Curves may be of any pattern, but the most typical idiopathic adolescent curve is that of a right thoracic curve, that is, the majority of the curvature occurs in the thoracic vertebrae, and it is convex to the patient's right side. Those vertebral bodies that tend to form one continuous arc are separated and designated as a curve. A line is drawn parallel to the top of the top vertebra in the curve, and a second line is drawn parallel to the bottom of the bottom vertebra in the curve. Perpendicular lines are then erected at these, and the angle of intersect is taken as the degree of spinal curvature. This is called the Cobb method of measurement, and is the measurement that is accepted by the Scoliosis Research Society the world around.

GUIDELINES FOR TREATMENT

The best treatment for scoliosis is early detection and prompt referral to a facility equipped to provide complete scoliosis care. Treatment of children with scoliosis falls into three categories: 1) observation, 2) bracing and exercise programs, and 3) surgery. Although treatment must be individualized to each patient, we may make the following generalized comments.

CLASSIFICATION OF SCOLIOSIS
(Adapted from H. Keim)

I. NONSTRUCTURAL SCOLIOSIS
- A. *Postural Scoliosis.* Usually noted in later years of first decade. Curves are always slight and disappear on lying down.
- B. *Compensatory Scoliosis.* Usually a result of leg length discrepancy. Pelvis dips down on the short side.

II. TRANSIENT STRUCTURAL SCOLIOSIS
- A. *Sciatic Scoliosis.* Not true scoliosis; an irritative form caused by pressure on nerve roots from a herniated disc.
- B. *Hysterical Scoliosis.* Rare, usually requires psychiatric treatment.
- C. *Inflammatory Scoliosis.* Seen with perinephric abscess or similar infection.

III. STRUCTURAL SCOLIOSIS
- A. *Idiopathic (Genetic) Scoliosis.* About 70% of all cases of scoliosis. Classified by age of onset.
 1. Infantile—before 3 years of age.
 2. Juvenile—age 3 to onset of puberty, usually age 10.
 3. Adolescent—from age 10 until maturity.
- B. *Congenital Scoliosis.* Probably not genetic.
 1. Vertebral.
 - a. Open—with posterior spinal defect
 - i. with neurologic deficit (e.g., myelomeningocele).
 - ii. without neurologic deficit (e.g., spina bifida occulta).
 - b. Closed—no posterior element defect.
 - i. with neurologic deficit (e.g., diastematomyelia with spina bifida).
 - ii. without neurologic deficit (e.g., hemivertebra, unilateral unsegmented bar).
 2. Extravertebral (e.g., congenital rib fusions).
- C. *Neuromuscular Scoliosis.*
 1. Neuropathic forms.
 - a. Lower motor neuron disease (e.g., poliomyelitis).
 - b. Upper motor neuron disease (e.g., cerebral palsy).
 - c. Others (e.g., syringomyelia).
 2. Myopathic forms.
 - a. Progressive (e.g., muscular dystrophy).
 - b. Static (e.g., amyotonia congenita).
 3. Others (e.g., Friedreich's ataxia, unilateral amelia).
- D. *Neurofibromatosis* (von Recklinghausen's disease).
- E. *Mesenchymal Disorders.*
 1. Congenital (e.g., Marfan's syndrome, Morquio's disease, amyoplasia congenita, various types of dwarfism).
 2. Acquired (e.g., rheumatoid arthritis, Still's disease).
 3. Others (e.g., Scheuermann's disease, osteogenesis imperfecta).
- F. *Trauma.*
 1. Vertebral (e.g., fracture, irradiation, surgery).
 2. Extravertebral (e.g., burns, thoracic surgery).

Figure 1

Measurement of a right thoracic curve. Top limit of the curve is superior border of T5. Lower limit of the curve is the inferior border of T11. Apex of curve is T8. The angle of intersection of the perpendicular lines to the limit vertebrae borders is the degree of spinal curvature. (Note the crowding of the ribs in the concave side of the curve.)



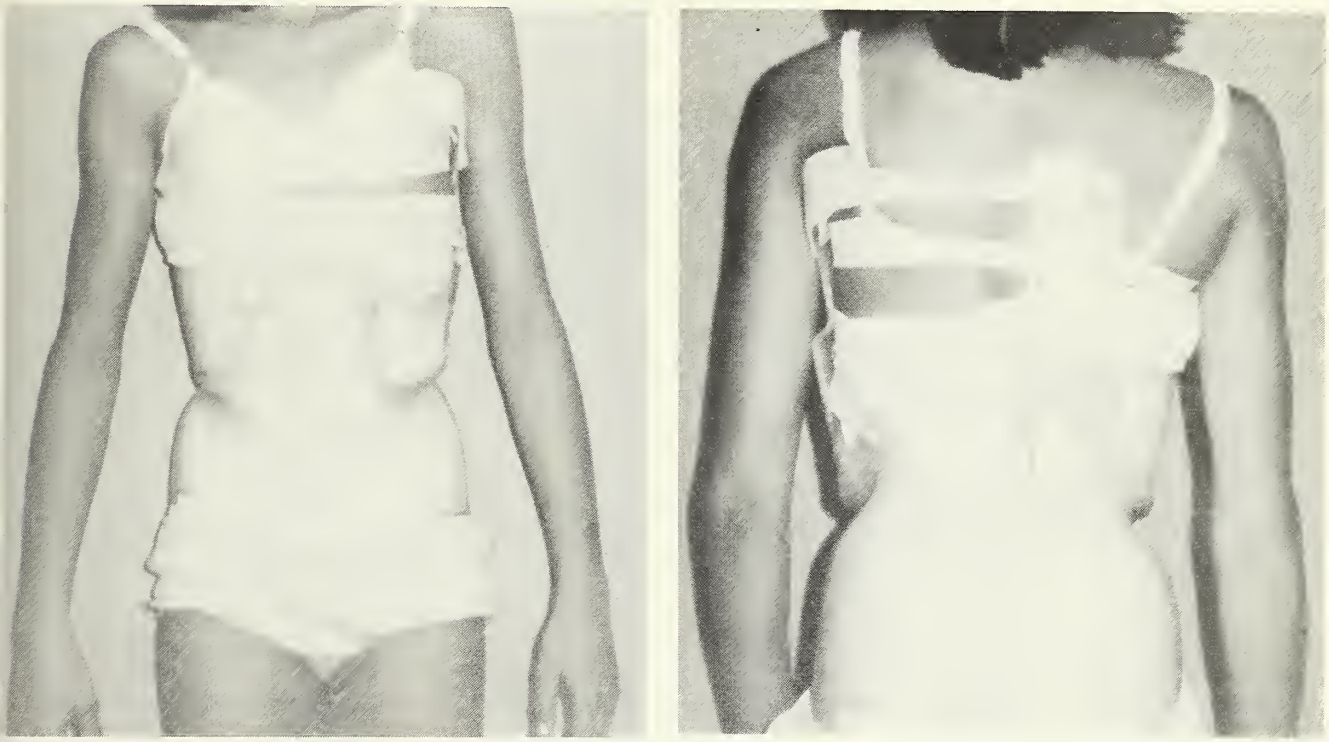
Spinal curvature measuring less than 20 degrees in a skeletally immature patient may be observed at frequent intervals, i.e., four months with routine repeat x-rays. All subsequent x-rays must be compared to the original film so that true progression is not minimized by observer bias or overlooked due to measurement error. Curves greater than 20 degrees and less than 45 degrees deserve aggressive treatment via a brace program combined with an active exercise routine.

The goal of all therapy in scoliosis is to prevent further deformity, and if the curve is found early and treatment begun early with rigid adherence to the treatment protocol, we may obviate the need for spinal surgery for children with idiopathic scoliosis. The most widely used brace is that described and introduced in this country in 1945 by Drs. Blount and Schmidt, the so-called Milwaukee brace.[1] This brace consists of a rigid pelvic girdle to which upright struts are securely fastened and secured in a ring around the neck. Slings can be attached to the uprights to apply forces on the rotated vertebral column to effect some element of correctability and to maintain alignment.

There are many variations on the theme of the Milwaukee brace, the most popular of which at this time is the Boston brace system. Many centers today use so-called "topless braces" for curves in the thoracolumbar and lumbar areas. These eliminate the unsightly neck ring of the Milwaukee brace and are cosmetically more acceptable for young people *(Figure 2)*.

If brace treatment is indicated, the child must be willing to spend 23 hours of each day in the brace and perform exercises as prescribed by the doctor and supervised by the physical therapist. Brace wearing must be continued until vertebral

Figure 2
The Boston brace (topless, i.e., no neck ring) used for low thoracic, thoracolumbar and lumbar curves.



growth has ceased. This is usually determined by the appearance and fusion of the iliac apophysis on the x-ray. Families and patients should understand that growth does not cease at the same age for all patients, and that wearing the brace must be continued until that individual child has reached skeletal maturity as determined by x-rays.

In curves greater than 45 or 50 degrees, in which significant spinal growth still remains, brace therapy probably will not be satisfactory. These larger curves have a greater propensity for progression, and hence the need for stabilization of the curve surgically.

The first spinal fusions for scoliosis were performed in 1911. There was little attempt to correct the spinal curvature, but simply to hold its progression by fusion *in situ*. The goal of treatment has not changed, but the techniques have improved during the years.

The current standard of care is to first obtain maximal correction of the spine by pre-operative traction or plaster casts. This is followed by spinal fusion, usually utilizing Harrington rods adjunctively.[4] The Harrington rod (*Figure 3*) may be likened to a jack, in that the ratchet device at its upper end is used to achieve maximal correction of the curvature. Once this correction has been achieved, the Harrington rod remains in place as an internal splint to keep the spinal fusion mass immobile during the healing process. Plaster casts are used following surgery to facilitate patient care and also to keep the spine immobile and allow adequate spinal healing.

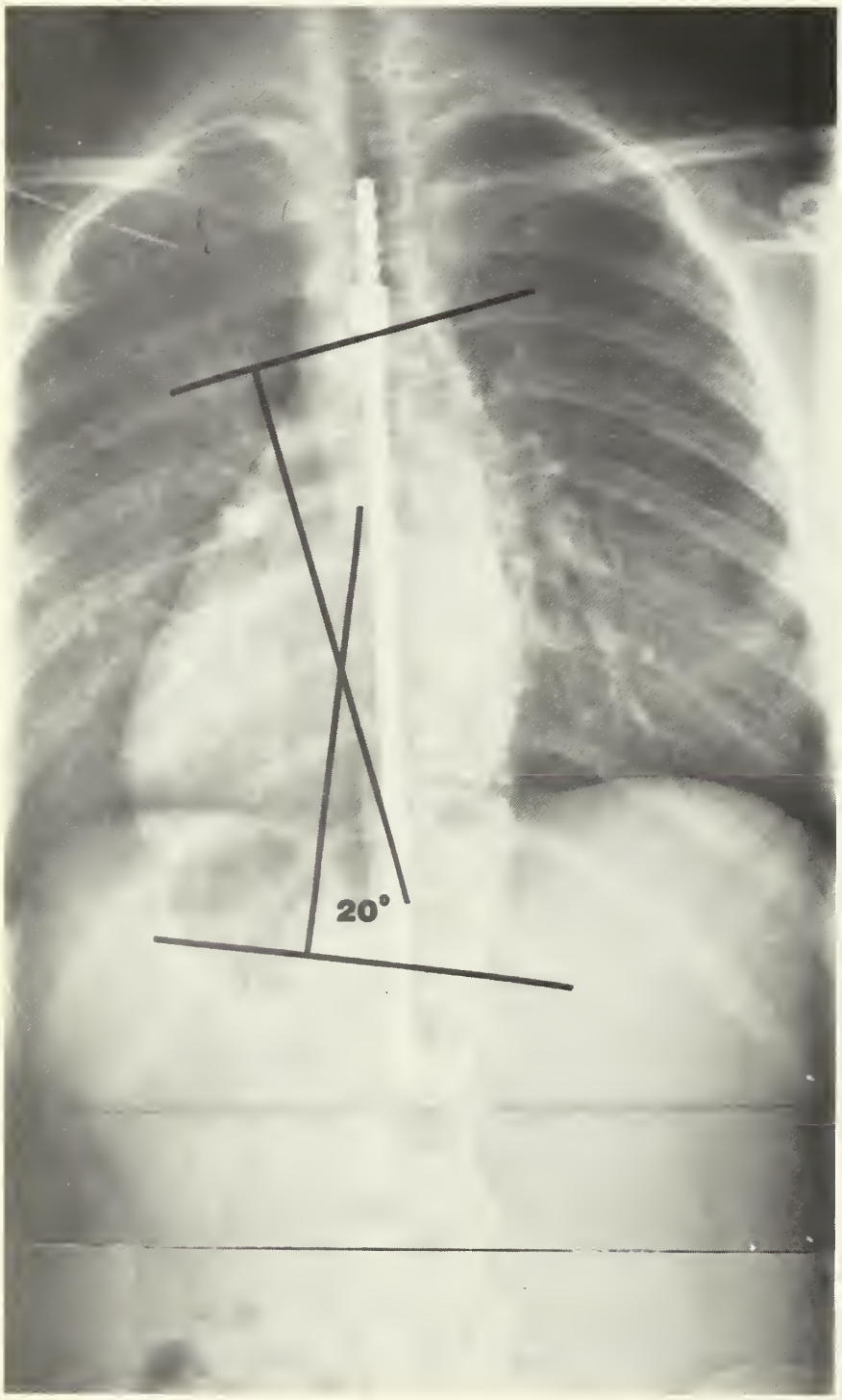
WHY SO MUCH FUSS OVER A CROOKED BACK?

The knowledge we are accumulating about untreated cases of scoliosis is remarkable. Long-term studies on scoliosis patients have shown us that these patients have an expected death rate twice that of the normal population. Most of these deaths are from cardiac and pulmonary causes. In patients with thoracic curves in excess of 60 degrees, decreased vital capacity and vital function are the rule rather than exception. Almost all adult scoliosis patients have significant back pain. Many are disabled from work because of the back symptoms.

It has been shown that curves in excess of 60 degrees in the thoracic area will progress after skeletal maturity, and that lumbar curves greater than 40 degrees also will progress later in life.[2] Female patients who become pregnant may experience an increasing curve following delivery of the child. For this reason, all women with scoliosis should be counseled to have routine physical examinations of the spine per-

Figure 3

Same patient as in Figure 1 two years following corrective spinal surgery. The curve was straightened by pre-operative traction and by intra-operative extension of the Harrington rod. Maximum correction was to twenty degrees which has been maintained by a sound spinal fusion from T4 to L1.



formed yearly during and following their child-bearing years. For all these reasons and many more, aggressive treatment of the child with a spinal deformity is justified.

SCHOOL SCREENING PROGRAMS

The best medicine is preventive medicine, especially for children who have scoliosis. The most expeditious way to examine children is where they are congregated together, i.e., in the schools. School screening programs in Delaware have radically decreased the need for scoliosis surgery of the adolescent idiopathic curve.[6] For this reason, family physicians throughout the state should become involved with local school boards to encourage an active screening program. Physical therapists, physical education teachers and school nurses can easily and quickly be trained to become excellent screeners. Materials are available upon request from the Scoliosis Research Society to aid school systems set up effective screening programs. The programs should be ongoing and part of the school calendar year.

It takes only 30 seconds for effective screening of a child, but that 30 seconds may be the most important time of that child's life.

BIBLIOGRAPHY

1. Blount WP: Use of the Milwaukee brace. *Orthop Clin North Am,* 3:3, 1972.
2. Collis DK, Ponseti IV: Long-term follow-up of patients with idiopathic scoliosis not treated surgically. *J Bone Joint Surg,* 51A:425, 1969.
3. Cowell HR, Hall JN, MacEwen GD: Genetic aspects of idiopathic scoliosis. *Clin Orthop,* 86:121, 1972.
4. Harrington PR: Technical details in relation to the successful use of instrumentation in scoliosis. *Orthop Clin North Am,* 3:49, 1972.
5. Keim H: Scoliosis. *Clin Symp,* 30:1, 1978.
6. MacEwen GD: Personal communication, 1977.

Huntington's Disease: Diagnosis and Treatment

OTT B. McATEE, M.D.
Madison

THE PURPOSE of this paper is to share our experiences with others in the treatment, care, diagnosis and prevention of Huntington's Disease (H.D.) since the meeting in Columbus, Ohio, in 1972 at which time a paper was presented.[1]

The diagnosis of a disease is essential to making a treatment plan and advising the patient and his family about the prognosis. It is a long, progressive disease with an average of ten to twelve disabling years.

This genetically determined, fatal disease has been traced to an autosomal, nonsex-linked dominant gene. Therefore, the offspring of a couple in which one parent carries the gene has a 50-50 chance of developing the disease.

The diagnosis depends on the history and clinical course and should be confirmed by autopsy with the C.N.S. studied by a neuropathologist.

Since there are numerous brain diseases which are known to have one or more H. D. cardinal findings—cerebral atrophy and striatal atrophy—the neuropathologist does not always find the diagnosis routine.

Since 1910, when the Madison State Hospital was opened, there has been an average of nine H.D. cases in the hospital at all times. All of those have come from about 14 families in southeastern Indiana. The history is more valuable if it is completed by a social worker with a background in genetics. In 1930 Hazel Stevens[2] started collecting data on H.D. at Madison State Hospital. Stevens' research concluded that the incidence of the disease is high in Indiana. McAtee[3] estimates that there are potentially 40 cases per 100,000 population.

Due to the high incidence of H.D. in this hospital since it opened in 1910, the disease is well known to most all hospital employees. Some employees here are "at risk." The medical staff has had more than average experience and sophistication in diagnosing and treating the disease.

A review of 16 autopsies studied by a neuropathologist[4] between 1958 and 1978 revealed that 13, or 81.3%, confirmed the clinical diagnosis of H.D. However, three did not.

The neuropathologist's verbatim reports from the study of the three cases of the Central Nervous System follow. The first case was Jacob-Creutzfeldt's disease. The second and third cases are of a father and daughter who were found not to have had H.D. but primary cerebellar disease.

CASE NO. 17655

A 65-year-old, childless female was admitted Nov. 21, 1961 with a scanty history and was diagnosed H.D. She followed a progressive course downward, similar to H.D., until she died Sept. 23, 1970. The neuropathologist's findings at autopsy were:

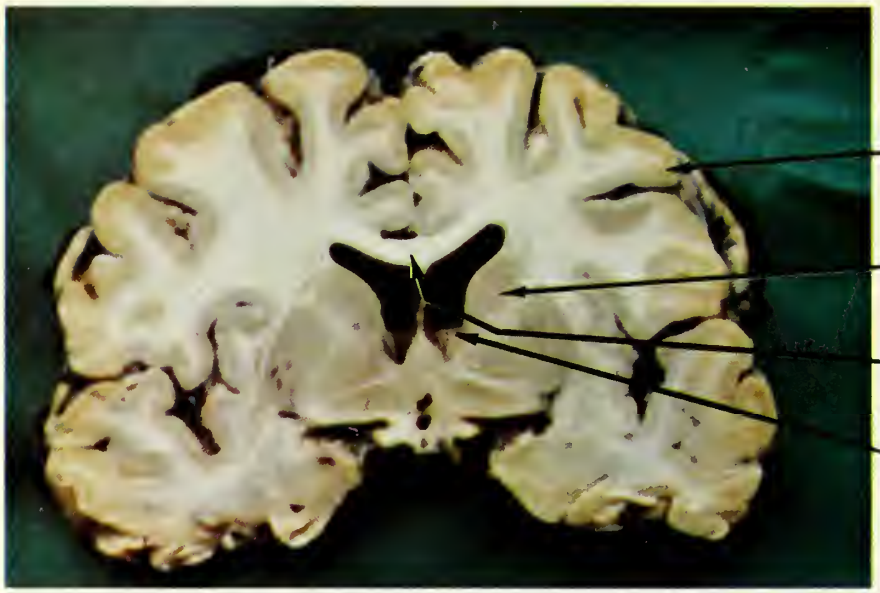
Final Neuropathological Diagnosis:

1. Cortical and striatal form of Jacob-Creutzfeldt's disease.
2. Thinning of the corpus callosum.
3. Hydrocephalus exvacuoles.
4. Mild folia atrophy of the lateral lobes of the cerebellum.

(The late onset of the neurological disease and the astrogliosis of

The author is Superintendent and Chief Medical Director, Madison (Ind.) State Hospital, and Assistant Professor of Psychiatry, Indiana University School of Medicine.

This paper originally was presented during the Huntington's Disease Symposium held Nov. 16-18, 1978 at San Diego.



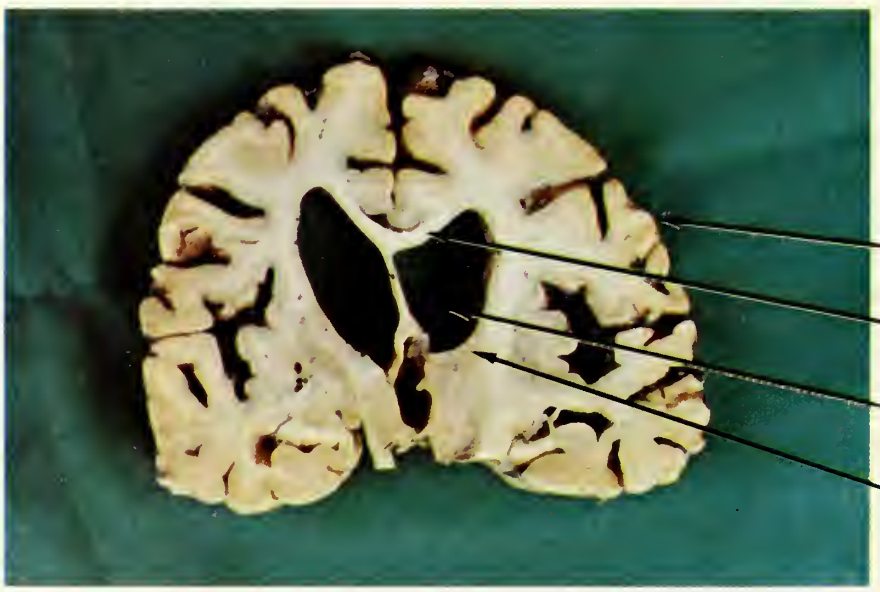
Coronal Section
Essentially Normal Brain

Mild Cortical Atrophy

Normal Striatum

Essentially Normal Corpus Collosum

Essentially Normal Ventricles



Coronal Section
Typical Huntington's Chorea Brain

Degeneration of Cortex

Degeneration of Corpus Collosum

Complete Atrophy of Caudate Nucleus

Compensatory Dilation of Lateral Ventricles

the cerebral cortex differentiates this case from H.D.)

CASE NO. 24108

This father of six children, a veteran and a handyman, was admitted Feb. 4, 1970 at the age of 39 with a diagnosis of H.D. for a number of years, associated with grand mal seizures. He died March 8, 1970. A complete autopsy was done. Lobar pneumonia was the immediate cause of death. Final diagnosis was:

Cerebral Cortex: The nerve cell degeneration is not that of H.D. The subcortical white matter is normal.

Striatum: Minimal changes. No shrinkage and atrophy of the head of the caudate nucleus. Changes of H.D. are absent.

Cerebellum: There is marked primary cerebellar atrophy.

Final Neuropathological Diagnoses:

1. Primary cerebellar degeneration.
2. Swollen abnormal cells in the nucleus gracilis.
3. Absence of olival ponteal dentate nucleus atrophy and nerve cell degeneration.

CASE NO. 25967

This patient was a 15-year-old female who was admitted Sept. 7, 1972 and who died eight days later. She was near moribund on admission. She was one of six children of Case No. 24108. The tentative admission diagnosis considered was:

1. Huntington's Disease.
2. Hereditary cerebellar degeneration.

Neuropathologic Diagnoses:

1. Severe and progressive primary cerebellar atrophy.
2. Absence of spinal, olivary and ponteal atrophy and degeneration.
3. Mild cerebral atrophy, nutritional.

(The neuropathologic changes are identical to the patient's father, Case #25967.) All six children and their father were studied at I.U. Medical Center, Indianapolis, and reported at the 1972 Conference on H.D. at Columbus, Ohio, and reported in *Advances in Neurology*, Raven Press, Page 105, as: "Epilepsy in Huntington's Chorea: Clinical and Neurophysiological Studies," Authors: Green JB, Dickinson ES, and Gunderman JR.

A second and third sibling of this family of six died in December 1976 in a southern Indiana general hospital. The body of one was autopsied and studied by a neuropathologist* at the University Hospital in Indianapolis. His findings were consistent with that of Byrd's, the neuropathologist who studied the brain of the father and one 15-year-old sibling.

PREVENTION

When all known people-at-risk are sterilized, there will be an immediate, marked decrease in H.D. Research in the field of chemistry and cell biology cannot be overemphasized. However, we already have the information to work toward stamping out the disease through prevention.

During the past six years, a counselor has spent 20 hours a week with Huntington's patients and their families. (The therapist's husband and two children are "at risk.") Any H.D. family member may be seen for counseling and a neurological evaluation. The counseling tends to lighten the anxiety and normal agitation. Those at-risk often ask what their chances are for developing H.D. A table has been developed where one can read off his risk at any age. This is based on the age of onset of 100 cases in southeastern Indiana.

About eight years ago, under the inspiration of Marjorie Guthrie, chapters of H.D. families were organized throughout Indiana. These chapters are kept alive by the H.D. family counselor at this hospital and others.

It is this writer's opinion that errors in diagnosis of H.D. are high. In the literature, we rarely see a report of autopsies being done. H.D. in children may be over-reported. At least variants are to be encountered in children. It apparently takes an average of 10 years for the full atrophy and degeneration to take place.

There has been a search at the Madison State Hospital for a drug with specific pharmaceutical action in relieving the tormenting, involuntary choreic phenomena. Thus, most tranquilizers have been used. The tranquilizer aids the sufferer in his or her ability to endure the suffering. Tranquilizers aid in combating the depression and agitation, as in other forms of mental illness. Vitamin B^6 has been tried with no objective improvements.

SUMMARY

Huntington's Disease is a "Goliath" to be dealt with. The patient lingers an average of 10 years after becoming unable to work. The family "at risk" suffers fear from the day the facts are revealed to them. The guilt felt by parents for taking the chance of passing the disease on to their children causes suicide in case after case.

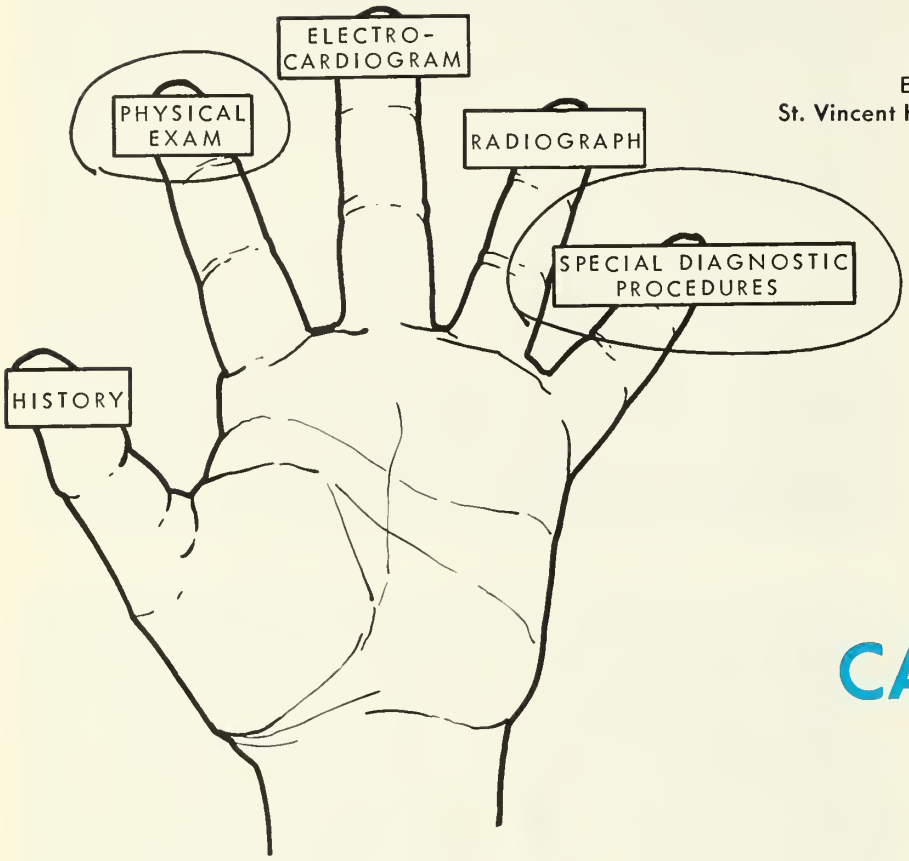
Research is a **must.** Much is yet to be learned from the field of chemistry. Microbiology is stubbornly withholding much from us. We are just on the fringe in the field of genetics. The neuropathologist is struggling to teach us from the dead. We are finally approaching the open field of prevention. Now in this day of "so-called" individual rights, we tremble when we advise a couple not to have biological offspring and to adopt their children. Sometimes the adoption authorities close the door to them when it is learned that one of the adopting parents is "at risk."

Because so many H.D. cases are psychotic, this writer recommends that each state have one or two state hospitals designated as Care-Treatment - Research - Prevention Centers for H.D. Each state also is encouraged to support a survey team to learn the exact number of cases in existence and the number of cases "at risk."

REFERENCES

1. McAtee OB, Stevens HH: Huntington's Chorea at the Madison State Hospital, 1910-1971. *Advances in Neurology*, Vol. 1, Raven Press, New York, 1973.
2. Stevens HH: Social problems related to Huntington's Chorea in southern Indiana. *Advances in Neurology*, Vol. 1, Raven Press, New York, 1973.
3. McAtee OB: Huntington's Disease in southeastern Indiana. *J Indiana State Med Assoc*, 66:8, 713-716, August 1973.
4. Byrd RP, neuropathologist, University of Louisville (Ky.).

*Jans Muller, M.D., Professor of Neuropathology, Indiana University School of Medicine.



R. JOE NOBLE, M.D.
C. C. HALLAM, M.D.
J. S. HILLIS, M.D.
E. F. STEINMETZ, M.D.
St. Vincent Hospital and Health Care Center
Indianapolis

THE FIVE FINGERS OF CARDIOLOGY

The Five-Finger Approach to Cardiac Diagnosis was conceived by W. Proctor Harvey, M.D., of Georgetown University, and further developed by J. Willis Hurst, M.D., of Emory University into its present form: The integration of all five approaches is diagrammed into a "fist" of cardiac-diagnosis.

Each month, THE JOURNAL will present a "finger of cardiology" as a self-assessment, emphasizing current and innovative diagnostic and therapeutic principles.

A 27-year-old lady complains of chest pain and palpitations. The chest pain is a sharp, aching one, located in the high left precordium, developing with exertion, lasting for about 20 minutes, and often radiating into the left arm. On other occasions, not necessarily with the discomfort, the patient notices palpitations, which are never sustained.

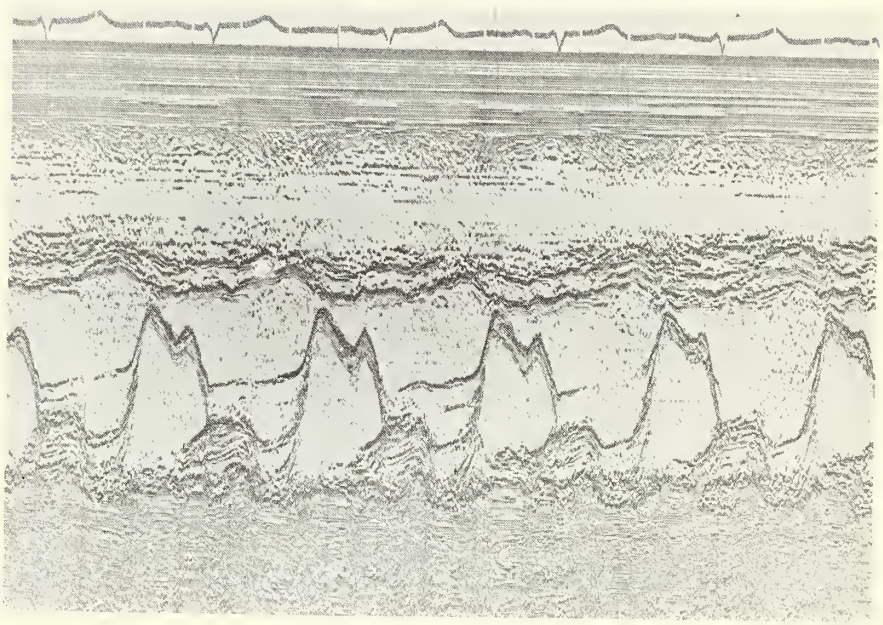
Physical examination is normal except for auscultation of the heart, which reveals a staccato clicking sound, heard over the apex, and timed in the middle of systole. The click initiates a high pitched, blowing murmur which builds up to and terminates with the second heart sound. When the patient sits, the click moves into earlier systole, and the murmur is prolonged. Upon standing, the click is no longer audible, and a holosystolic apical blowing murmur is heard.

QUESTIONS

- What is the explanation for the patient's chest pain and palpitations?
- What non-invasive laboratory evaluation should confirm your impression?

A Self-Assessment

ANSWER



The physical findings suggest mitral valve prolapse. The click is heard when the prolapsed valve reaches the extent of its excursion toward the left atrium; and the murmur results from mitral regurgitation following the prolapse and consequent loss of apposition of the two mitral leaflets. With a decrease in ventricular volume, such as anticipated with the sitting and standing posture, the prolapse occurs earlier and earlier in the heart cycle, explaining the auscultation of an earlier click and longer murmur.

The mechanism by which mitral valve prolapse produces chest pain and tachyarrhythmias is unknown. Conceivably the tension exerted by the prolapsed leaflet on the papillary muscles and attached ventricular wall could result in discomfort and ectopy. Alternately, an underlying myocardial abnormality may be responsible for the pain, the arrhythmias, and the prolapse.

Non-invasive investigation should include an M-mode echocardiogram and possibly a 24-hour ambulatory monitor (Holter Monitor). The echocardiogram *(note figure)* shows that the mitral valve suddenly moves posteriorly in mid and late systole; this is the classic echocardiographic pattern of mitral valve prolapse. The Holter Monitor demonstrated only isolated premature ventricular complexes. No complex ventricular rhythm disturbance was documented. The patient was not treated with anti-arrhythmics, and has done well.

Infrequently, the chest pain associated with mitral valve prolapse may respond to beta blockade. Other approaches, except for continued reassurance, are generally not helpful. This patient received no specific therapy.

In summary, the patient presented with the classical historical and physical findings of mitral valve prolapse, i.e., Barlow's Syndrome. The echocardiogram confirmed the clinical diagnosis. Despite chest pain and ventricular ectopy, the patient has done well without specific therapy.

Ruptured Abdominal Aneurysm

A 69-YEAR-OLD GENTLEMAN presented to St. Vincent Hospital Emergency Room complaining of severe abdominal and left flank pain of approximately 18 hours duration. On examination he was alert, vital signs were stable, blood pressure was 140/70, pulse was 84 and regular. He had normal sinus rhythm and his chest was clear. Cardiac examination disclosed a Grade III/VI mitral insufficiency murmur.

Abdominal examination revealed a pulsatile abdominal mass. There were no abdominal bruits. The liver and spleen were not enlarged, and the peripheral examination showed strong femoral, popliteal, dorsalis pedis, and posterior tibial pulses, bilaterally.

Laboratory tests included a hemoglobin of 16.6, a white count of 11,000, an amylase of 170, slightly above normal. Urinalysis found urine loaded with bacteria and white cells. A flat plate of the abdomen displayed left psoas shadow obliterated by what appeared to be fluid. The right psoas shadow was faintly visible.

The patient's old chart revealed that in 1974 and in 1975 he had a suggestion of an abdominal aortic aneurysm, first diagnosed on intravenous pyelogram by calcific shadows and a displacement of the left ureter. In March 1979 an IVP report read that the abdominal aortic aneurysm was enlarging and the left ureter was displaced more than on previous films.

- **What is this man's diagnosis?**
- **What should be done?**

Audience: Dr. Wiggans, you said this gentleman was alert, that there were stable vital signs and that he had strong lower extremity pulses. And you also said the flat plate of the abdomen revealed that the left psoas shadow was obliterated?

Dr. Wiggans: Yes. What is the significance of this?

Audience: Possibly intra-abdominal fluid?

Dr. Herring: It suggests retroperitoneal fluid.

Audience: And the urine was loaded with bacteria and white cells?

Dr. Wiggans: Yes. I would like a differential diagnosis for this gentleman.

Audience: I believe that this man had a left perinephric abscess, based on the urinalysis and left flank pain.

Dr. Wiggans: That is certainly a point for consideration.

Audience: I believe he had pancreatitis and retroperitoneal fluid obliterating the left psoas shadow.

Dr. Wiggans: That is also possible.

Audience: What was the duration of pain?

Dr. Wiggans: Eighteen hours, unremitting. The patient was still alert with stable vital signs. He had a strong history from old records of a possible abdominal aortic aneurysm and of progressive enlargement on serial IVP films. Does this alter your thinking?

Audience: Could this have been an ectatic aorta?

Dr. Wiggans: An ectatic aorta can always provide some difficulty in abdominal exam, but from the serial films and history, it's unlikely.

Audience: Could he have had a ruptured or leaking abdominal aortic aneurysm with strong lower extremity pulses?

Dr. Wiggans: Yes.

Dr. Herring: We have established that this gentleman may, indeed, have had pain from his abdominal aortic aneurysm. The question is, what should be done?

Audience: 1) Admit the patient to Intensive Care for close observation, and rule out other above-mentioned possible diagnoses?

2) Get CAT scan of the abdomen?

3) Get ultrasound of the abdomen?

4) Get an arteriogram?

Dr. Wiggans: Dr. Herring and I felt that, due to the patient's history, there was a strong suggestion of tender, possibly leaking or ruptured aortic aneurysm. A definitive decision and study were indicated immediately. The gentleman was stable, and it was elected to start two large bore intravenous catheters for slow infusion and send him to x-ray for abdominal aortogram, close monitoring and supervision. The abdominal aortogram revealed an 11 cm. abdominal aortic aneurysm and, on lateral and oblique films, it was felt possibly to involve the left renal artery. There was no evidence of rupture or leak of dye. What should have been done with this patient?

Introduction

The subject of ruptured abdominal aneurysm was discussed during the Peripheral Vascular Conference conducted in August 1979 at St. Vincent Hospital, Indianapolis. This report was prepared for THE JOURNAL by Austin L. Gardner, M.D., Indianapolis. Case presentation by John Wiggans, M.D., resident physician and Vascular Surgery Fellow, and by Malcolm B. Herring, M.D.

Audience: If the aneurysm involved the renal artery, wouldn't it have been safest to observe the patient?

Dr. Wiggans: No. It was strongly felt that this gentleman, indeed, was having pain from a leaking abdominal aortic aneurysm and that possible involvement of the renal arteries was no contraindication to operative intervention.

Audience: But wouldn't this have made the surgery more difficult?

Dr. Wiggans: Yes, but that didn't alter the fact that this gentleman was having pain and possibly had a ruptured or leaking abdominal aortic aneurysm, and that operative intervention was considered essential for his survival.

I would like to briefly give the patient's course: Upon opening the abdomen, we found a large retroperitoneal hematoma. After appropriate exposure, the retroperitoneum was entered, and the tamponade effect of the retroperitoneal hematoma was released. A large amount of bleeding ensued. The aorta was quickly crossclamped, and after approximately 20 minutes of dissection, the aortic crossclamp was found to be suprarenal.

The renal arteries were perfused with chilled Ringers's lactate. A knitted Dacron bifurcation graft was placed. Re-implantation of both renal arteries was felt necessary. Grafts were swung bilaterally from renal arteries to abdominal aortic graft. The patient experienced continued hypotension throughout the operation, despite large amounts of blood and crystalloid. At the end of the operative procedure, the patient was sent to the Recovery Room in critical condition with blood pressure of 90, with no urinary output and a wedge of 15. Estimated blood loss was 2,500 cc.

This patient provided an excellent example of how abdominal aortic aneurysm may present to the Emergency Room and demonstrated that the patient's initial vital signs may, indeed, be stable and that his lower extremity pulses may be strong, despite the presence of leaking or ruptured abdominal aortic aneurysm.

The patient's past history strongly suggested that an abdominal aortic aneurysm was present. This gentleman was stable, and it was felt that operative intervention was mandatory. Because the patient was stable, Dr. Herring felt an abdominal aortogram was indicated.

If the patient had not been stable, he would have been taken directly to the Operating Room, resuscitated, and operated on, without going to x-ray. The abdominal aortogram was helpful in this patient because, preoperatively, it gave some indication of proximity to the renal arteries. Approximately 4% of abdominal aortic aneurysms are suprarenal.

Dr. Herring: I would like to summarize several points:

1) You have seen the difficulty in diagnosis, and the fact that stable presentation and strong pulses in the extremity may be a confusing issue to the physician seeing the patient in the Emergency Room with a pain and a pulsating mass.

2) If this man were known to have involvement of the renal arteries, prior to rupture, what should have been done? Complex medical problems always alter decisions, and individualization is necessary. However, on an elective basis, these problems are much easier to deal with. It is possible to perform any number of several procedures to perfuse the renal arteries, either by means of a shunt or cold perfusion to insure adequate perfusion and allow safe, operative intervention. The risk of renal failure is certainly greater than with an elective aneurysm, not involving the renal arteries; but with proper planning, this risk can be minimized. A physician in Atlanta has advocated decapsulation of kidneys once profound shock and renal ischemia has occurred.

3) Complex medical problems such as mitral insufficiency can much better be planned on an elective basis. This patient was hypovolemic. His wedge pressures were never normal during this operation; proper planning and preoperative volume replacement would have been advisable in this patient on an elective basis.

4) What is the course of untreated aneurysms and how should an aneurysm be followed? Aneurysms, 6 cm. or greater, have a high incidence of rupture. This is found to be 50% in the first year. A five-year survival for an aneurysm, 6 cm. or larger, is approximately 18%. It is felt, therefore, that most abdominal aortic aneurysms 6 cm. or larger should be operated upon. Aneurysms less than 6 cm. should be individualized. Certainly, a tender aneurysm of any size should be operated upon, as it is known that small aneurysms may rupture, causing significant problems.

5) Abdominal ultrasound is an excellent way to follow, noninvasively, the course of aneurysms. We feel that abdominal aortogram should be performed when operative intervention is planned. Of course, individualization of all patients is necessary. Patients with multiple, complex medical problems require careful individualization and careful therapy planning to insure the safest possible outcome with operative intervention.

Finally, it is felt that complex medical problems may not necessarily be a contraindication of operative intervention, but careful planning should be done.

Continuing Medical Education

Secondary Somatic Problems: Recognition and Treatment

Part 2: Hypochondriasis and Hysterical Dependence Disorder

DAVID F. WEHLAGE, M.D.
South Bend

The author, an Associate Clinical Professor of Psychiatry, Indiana University School of Medicine, South Bend, Ind., is a Fellow of the American Psychiatric Association and a Diplomate of the American Board of Psychiatry and Neurology.

This is the second of a three-part series on Secondary Somatic Problems. Part 1 dealt with Psychosomatic and Primary Depression Disorders; Part 3 will deal with Obsessional Disorder, Malingering and Acute Situational Disturbance. A bibliography was published with Part 1, which appeared in the October 1979 issue. Review questions, upon successful completion, have been approved for one Category 1 credit hour toward the AMA's Physician Recognition Award. The quiz appears on Page 861.

Publication supported in part by a grant from the Indiana Medical Foundation, Inc.

Introduction

Secondary somatic problems refer to the large group of physical complaints that are partially or totally emotional in nature and etiology. In spite of the fact that physicians are asked to consider the "whole man" (physical ailments cause emotional problems and vice versa), it is obvious all physicians still try to categorize what is the primary source of the complaint—the soma or the psyche. This paper helps delineate the various patterns of psychological difficulties that are seen by physicians because of complaints of physical discomfort or disease.

HYPOCHONDRIASIS

Nature of complaints: There are multiple complaints possible but each individual tends to focus on a stable and predictable constellation of complaints. Complaints are well formed and articulated in much detail. Hardly any clinical progression or change occurs over time. Complaints fit a diagnosable picture only partially. Usually starts after age 35.

Patients' attitude toward their complaints: These patients have an *exaggerated concern* about their complaints. They have a hopelessness about relief but are always looking for a "cure" on their own terms. They have little self-involvement with relieving their complaints and show some evidence of seeking attention from their complaints. They are *locked* in a peroccupied way to their complaints with a withdrawal from activities and people.

Physician's emotional reactions precipitated by patients that should be anticipated and handled by the physician: Because these patients "doctor shop," the physician may be stimulated to become the patients' savior and become grandiose about finally "curing" them. He will become defensive and angry as that fails. Because of the hopeless communications, the physician feels a need to do something and dispel the patients' belief that physicians are incompetent. These patients initially stimulate a desire for the

physician to be clever and look for "zebras." This is shortlived since the physician becomes bored and angry with these patients' lack of response.

Kind of workup indicated: A minimal workup is indicated. Wait for a progression or worsening of clinical condition before extensive investigation. Do not look for a rare disease. Check old records, get a longitudinal history and information from family on the length of time complaints have existed and the lack of progression. Never repeat tests already done.

Treatment: a. Minimal medication for symptomatic relief. Let patients decide what works and how to use it. No psychotropic medication.

b. See regularly—every three to four weeks for 20 minutes. Ten minutes for complaints and brief physical, and 10 minutes listening and being friendly about whatever patients wish to discuss.

c. *No* referral to a psychiatrist.

d. Do not presuppose these patients want to get rid of complaints. The goal is how to let patients keep their complaints with minimal suffering and minimal use of medical services.

e. Do not doubt or challenge these patients' pain and do not be too smart too soon, presupposing that the complaints can be relieved or diagnosed.

f. Inform patients there is nothing dangerous or life-threatening about their complaints from your examination and experience. They want to be ill, not to die.

g. Let patients review all their complaints each visit without comment. Help patients live with persistence of complaints through enlightened pessimism: "I do not know if anything can be done about your back pain, but sometimes back pains get better after a time by just doing what you have been doing." "What will you do and how well can you manage if your pain does not get much better?"

h. Encourage self-help programs: "What have you found makes it better?" "That sounds like a good idea to me." "I could not have thought of anything better to do. I am glad you thought of that."

i. These patients are immune to suggestions. They will get worse with reassurance that everything will be fine. A positive diagnosis will make them worse. Do not make a diagnosis or label their complaints.

j. Friendship, not cure of complaints, is the goal with these patients. Try to make these patients interesting by being actively friendly and encouraging them to talk about themselves and their lives. They need permission to talk about themselves and will initially resist it by only wanting to talk about their complaints. Use such ploys as, "I saw in the paper your son made the basketball team," etc.

k. Make a pact with patients that they will only share their complaints with you. If patients can stop complaining to others, everyone will feel better.

l. Anticipate the patients' response, e.g., warn patients they may become angry at times when complaints are not cured, but urge them to keep their appointments anyway.

m. Make verbal responses that let patients know how "courageous" they are for functioning in spite of their complaints: "It is amazing to me that you could do that with all the pain you have."

Response to treatment: These patients get worse and more hostile toward the physician when he:

a. Challenges their complaints as being unreal;

b. Tries to make a diagnosis with expectations that their complaints can and will be cured;

c. Reassures them everything will be fine;

d. Tries to tell patients what to do without listening to complaints;

e. Gets hostile, defensive, and rejecting toward them.

These patients will be able to live with their complaints and basically be better from everyone else's standpoint if the above treatment is followed.

HYSTERICAL-DEPENDENCE

Nature of complaints: The complaints are unformed, fragmented and vague. They vary and change constantly. Patients have a highly personalized, dramatic way of presenting their complaints. Complaints are frequently very expansive and cover the whole body. Any complaints that are recognizable are of the "tension-spasm" variety.

Patients' attitude toward their complaints: In spite of their dramatic presentation, there is an obvious lack of concern about their physical complaints. They are obviously willing to talk about things other than physical complaints. (Usually they are able to readily reveal their anger about their social situation.) They do have a desire to feel better and have some hope of doing so.

Physician's emotional reactions precipitated by patients that should be anticipated and handled by the physician: The vagueness of the complaints makes the physician feel helpless and makes him feel pressured to find a medical explanation. These patients' emotional turmoil may frighten the physician. He can become defensive because these patients "professional shop" (ministers, lawyers, etc.), not just "doctor shop." They can be seductive and stimulate a physician to become overinvolved with their problems.

Kind of workup indicated: Only a minimal *outpatient* workup. These

patients usually do not demand much of a workup. They only want some attention from an authority (fatherly) figure like the physician. Do not hospitalize since they may manipulate to stay in the hospital where they are treated special and relish the services offered. At discharge time, a whole new set of complaints will be presented in an effort to prevent discharge.

Treatment: a. No medications should be used. These patients' compliance with any type of medication is poor.

b. They tend to be very suggestible from authority figures, so they will feel better just being heard and receiving some advice.

c. Simple counseling and advice is the treatment. These patients have unsatisfied needs for attention and reassurance. Help patients focus on social and personal issues, not medical, physical issues.

d. Do not get angry with patients but firmly expect patients to keep appointments and use their alloted appointment time for their required attention and receipt of advice. They are not to call at night and times outside of office hours.

e. Maximize the placebo effect of the charisma of the physician by being concerned and fatherly, but do not let these patients manipulate special favors.

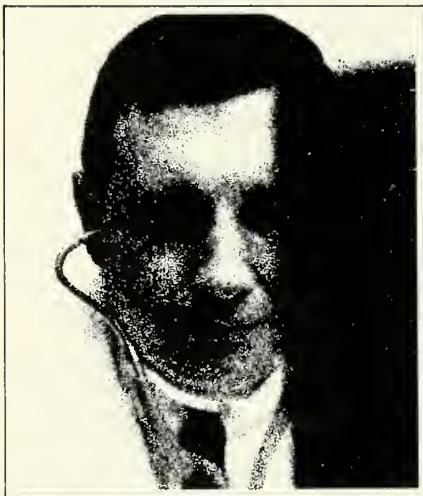
f. Medical education procedures are of no value. These patients do not want technical information and/or explanations.

g. Do not try to make a medical diagnosis.

h. Do nothing except give unhurried, specific amount of time to these patients.

i. May refer to a social agency if there are significant situational problems or to a psychiatrist if there are no obvious monumental situational problems aggravating their emotional state which is in turmoil.

Response to treatment: Relief is always temporary and relapse is common. However, the intermittent relief is very good and appears miraculous to the patients and the physician. These patients' lives remain unhappy because of their poor judgment in complicating their lives and spending a major portion of their emotional life feeling cheated. They seldom develop serious physiological disease and, in fact, remain extremely healthy in the face of their unhappiness and multiple physical complaints.



MALPRACTICE INSURANCE AVAILABLE

Owned by PHYSICIANS

Operated by PHYSICIANS

For the protection of PHYSICIANS

P&SLI

Physicians & Surgeons Liability Insurance Co., Inc
800 MacArthur Boulevard / Munster, Indiana 46321
219 836-2288

Dermatology

CLINICAL NOTES

JERE D. GUIN, M.D.
Kokomo

More on Topical Clindamycin

A year after last year's *Clinical Notes* article, clindamycin remains the most effective topical antibiotic for acne. It is superior to both tetracycline and erythromycin in reducing both the number and metabolic activity of the anaerobic flora.[1]

In approximately 20% of individuals using either topical erythromycin or clindamycin, strains of *Propionibacterium acnes* appear which are resistant to *both* antibiotics.[2,3] These two antibiotics share a common binding site on the 50 S ribosomal subunit, which probably explains the parallel resistance. The original "wild" strains return one or two months after topical antibiotic treatment is discontinued.

There is still no official government approval for topical clindamycin. If you want to compound your own, you should follow certain ground rules.[4,5] Clindamycin phosphate and hydrochloride are equally effective in 1% concentrations,[6] but the ingredients of the former are more expensive. Unlike many other antibiotics, water does not reduce the stability of clindamycin. On the contrary, a 1% concentration requires the presence of about 20% water. This means some lotions made from absolute alcohol are not going to be effective. An "ideal" vehicle contains 70% isopropanol, 10% propylene glycol and 20% water.[5] Vehicle N®, an elegant commercial vehicle in a convenient applicator bottle, eliminates most of the problems in compounding a clindamycin lotion.

So far, no reports have appeared of pseudomembranous entercolitis (PME) in man from topical clindamycin. However, it can be so induced in the hamster,[7] an animal extremely susceptible to this complication. PME is caused by a toxin produced by *Clostridium dificile*.[8] This organism overgrows because clindamycin is highly effective against most anaerobic bacteria but not against most Clostridia. In man, facial skin absorbs less than 10% of the topically applied drug.[3] This may explain why PME has not been a problem with topical therapy.

REFERENCES

1. Leyden JJ, McGinley KJ, Mills ON, Kligman AM: In vivo comparison of topical and systemic antimicrobicil agents. Effect on Propionibacterium acnes and skin surface lipids. (Exhibit) *Amer Acad Derm,* San Francisco, Calif. Dec 4-6, 1978.
2. Crawford WW, Crawford IP, Stoughton RB, Cornell RC: Laboratory induction and clinical occurrence of combined clindamycin and erythromycin resistance in Corynebacterium acnes. *J Invest Dermatol,* 72:187-190, 1979.
3. Stoughton RB: Topical antibiotics for acne vulgaris. Current usage. *Arch Dermatol* 115:486-489, 1979.
4. Lacine NC, Orr RJ, Peters LS, Flynn GL: Topical clindamycin for acne. Part 1: Current prescribing practices. *Am Pharm,* NS18, 615, 1978.
5. Orr RJ, Lacine NC, Peters LS, Flynn GL: Topical clindamycin for acne. Part 2: Guidelines for extemporaneous compounding. *Am Pharm,* NS18, 663, 1978.
6. Guin JD: Topical clindamycin: A double-blind study comparing clindamycin phosphate with clindamycin hydrochloride. *Int J Dermatol,* 18:164-166, 1979.
7. Feingold DS, Chen WC, Chou D, Chang T: Induction of colitis in hamsters by topical application of antibiotics. *Arch Dermatol,* 115:580-581, 1979.
8. Bartlett JG, Chang TW, Gurwith M, Gorback SL, Onderdonk AB: Antibiotic-anocratal pseudomembranous colitis due to toxin-producing clostridia. *N Engl J Med,* 298:531-534, 1978.

WILLIAM M. DUGAN, JR., M.D.
Board of Directors
American Cancer Society

New information from
Indiana Division
American Cancer Society, Inc.
2702 East 55th Place
Indianapolis 46220

CANCER CORNER

EVERY PHYSICIAN'S OFFICE—
A CANCER DETECTION CENTER

Clinical Alternatives to Radical Mastectomy

A Consensus Development Conference on "The Treatment of Primary Breast Cancer: Management of Local Disease" was held at the National Institutes of Health on June 5, 1979. The purpose of the conference was to address the following question:

Are there clinical alternatives to radical mastectomy which minimize patient morbidity and do not decrease a patient's survival potential?

The NIH consensus development program brings together practicing physicians, biomedical research scientists, consumers, and others in an effort to reach general technology, whether it be a drug, device or medical or surgical procedure.

At the treatment of primary breast cancer meeting, three categories of surgical techniques were discussed:

- Radical mastectomy
- Total mastectomy which removes axillary lymph nodes, but preserves the pectoralis muscles
- Lesser surgical procedures such as segmental mastectomy with or without radiotherapy

There was also discussion of radiotherapy as a primary treatment of local breast cancer.

The Halsted radical mastectomy initially introduced for locally advanced breast cancer has been the traditional treatment for the past 80 years. Selection in the past appears to have been based on this tradition rather than tailored to a patient's stage of disease or histologic type. As breast cancer has been diagnosed with greater frequency in its earlier stages (Stage I and Stage II), a major question has been posed to the medical community as to whether this "standard," developed at a time when most women had not been diagnosed until they had extensive local disease, needs to be changed.

Several surgical options to the Halsted radical mastectomy were discussed by the panel.* The data that have been generated in several series indicate that a total mastectomy with axillary dissection can be considered a satisfactory alternative to the Halsted radical for those women with Stage I and Stage II disease. The axillary dissection in this procedure is done for staging purposes as well as for therapeutic benefit.

The consensus of the panel was that a procedure that preserves the pectoral muscles, i.e., a total mastectomy with axillary dissection, provides equivalent benefit to women who have Stage I or selected Stage II breast cancer. Therefore, total mastectomy with axillary dissection should be recognized as the current treatment standard.

It was also the consensus that a two-step procedure should be done in most cases, i.e., a diagnostic biopsy should be studied by permanent histologic sections before definitive therapeutic alternatives are discussed with the patient.

The consensus of this panel was that the question of post-operative radiotherapy is moot pending further results of adjuvant clinical trials. Lesser surgical procedures such as segmental mastectomy with or without radiotherapy were discussed. Segmental mastectomy poses the problem of leaving residual breast tissue. The early data presented by Dr. Umberto Veronesi from the National Cancer Institute of Milano, Italy, indicate that the residual breast tissue that remains after segmental resection and post-operative radiation does not appear to harbor clinically significant breast cancer. The length of patient follow-up of this trial is about four years.

Primary radiation therapy provides two alternatives, either administered in addition to a minimal surgical procedure, or as a single mode of therapy. The trials utilizing primary radiation therapy and the trials dealing with segmental mastectomy are in a stage too early to allow determination of survival benefits, but control of local recurrence appears to be similar to current surgical procedures. The trials that explore the question of lesser surgical procedures and those trials exploring alternate modalities to surgery warrant further follow-up and enthusiastic support. These studies should also help to answer the question of the clinical significance of multifocal diseases.

Specifically, the panel supported further clinical investigation into the roles of segmental mastectomy and primary radiotherapy. The National Surgical Adjuvant Breast Project (NSABP) protocol was endorsed in regard to answering the question about the effectiveness of lesser surgical procedures in women with Stage I and Stage II carcinoma of the breast. These ongoing clinical trials, because of their exciting preliminary results, warrant support both from patients and physicians so that the continuing search for the optimal treatment can progress to the point of maximal survival and minimal morbidity.

*Members of the Consensus Development Panel were: John Moxley, III, M.D., University of California, La Jolla, Calif., chairman; John R. Duran, M.D., University of Alabama in Birmingham; Bernard Fisher, M.D., University of Pittsburgh, Pittsburgh; Samuel Hellman, M.D., Harvard Medical School, Boston; Mrs. Rose Kushner, Breast Cancer Advisory Center, Kensington, Md.; Bernard Pierquin, M.D., Universitarie Henri Mondor, France; Jerome Urban, M.D., Memorial Institutuo Nazionale per le Studio e la Cura Dei Tumori, Italy; Joseph C. Allegra, M.D., Jane Henney, M.D., and Franco Muggia, M.D., National Cancer Institute.



The Audi 5000.

Take a long test drive and figure out the difference diesel makes.

PORSCHE+AUDI
Nothing Even Comes Close

See your nearby Audi dealer.

BOOK REVIEWS

Review of Allied Health Education: 3

Editor, Joseph Hamburg, M.D. Copyright 1979, University Press, Lexington, Ky. 40506. 161 pages, $7.50.

This is the third in a series designed to provide a current appraisal of allied health education. Physicians, particularly older ones, should they read this book or others assessing the progressive development of the allied health professions, will be surprised to learn the extent to which the physicians' allies have expanded their respective roles in the health care of this country.

Understandably, the growth of the various allied health divisions has been uneven, being handicapped by lack of communication with the physicians whom they were created to help and also with each other. Given the human tendency for each person and each organization to protect their own turf, it is inevitable that misunderstandings often have slowed progress.

However, there is evidence in this volume that clearer concepts of the contribution each kind of health professional should be making are emerging. Better standards for training are being defined and attempts better to estimate the manpower required in each division are being made.

This reviewer was surprised to learn that about 7,000 nurse practitioners have been prepared in many different types of programs in the past 12 years since the concept began to take hold in America. The American Nurses' Association sees the role of the nurse practitioner as embracing the taking of health histories, physical examinations, ordering of usual diagnostic measures, interpreting data, developing and implementing therapeutic plans. She presumably accepts the obligations and responsibilities implied in being a practitioner-clinician. State practice laws in 31 states have been changed within the last five years to accommodate the new responsibilities assumed by nurse practitioners. The standards for preparation of these new deliverers of medical care, whose activities so closely approximate those of licensed physicians, have not been agreed upon and standardized. However, this is coming.

The chapter on "Development Issues and Education in Respiratory Therapy" furnishes an excellent example of the way in which all the paramedical groups are re-examining, and hopefully upgrading their roles in the health care system. As new knowledge and more sophisticated equipment continue to burgeon in the respiratory field, its technicians are searching for more knowledge, recognition and compensation. The American Association for Respiratory Therapy has grown from 2,500 in 1947 to 20,000 members in 1978. Accreditation for technicians and therapists is now awarded by the National Board for Respiratory Therapy. Education programs are accredited by the Joint Review Committee of the AMA. Four levels of roles for respiratory workers have been delineated; depending on their proficiency demonstrated in on-the-job training, college undergraduate and postgraduate education, and oral and written examinations. Since there are an estimated 70,000 workers in the field in some capacity, only about 25,000 of whom hold any professional accreditation, it is understandable that "anxiety and potential conflict between workers with and without credentials" exists. As the criteria for upward mobility are better outlined, more technicians will seek the more prestigous and more lucrative jobs. More patients will have more sophisticated testing and treatment and will pay more for it.

Laboratory workers, emergency room technicians, dietitians, social workers, physical therapists, rehabilitation counselors and many other groups are clamoring for greater scope, greater recognition, and better pay. More instructors for all these paramedical people with differing backgrounds and different priorities are entering the scene.

For physicians brought up in the medical atmosphere of a generation ago and even for younger ones who may be unaware of the changes in medical practice going on around them, this book and the others in the series will prove to be enlightening and possibly disturbing reading. The status quo is not what it used to be. Whether this is for better or for worse, the future will decide. But each of us had better be prepared for change.

PAUL S. RHOADS, M.D.
Richmond
Internal Medicine

Review of Medical Physiology, 9th Edition

Ganong, W. Copyright 1979, Lange Medical Publications, Los Altos, Calif. 94022. 618 pages, illustrated, $14.

This edition represents an updating of the 8th edition, published in 1977. The book's mission is to provide a concise summary of human physiology. Appropriate aspects of general and comparative physiology are included. Each section also presents a summary of relevant anatomic considerations. This text, like other Lange publications, is frequently revised. Hence, its information can be regarded as current. The fact that this book is available in 12 languages, with two additional translations underway, adds to its luster. It is recommended for medical students, members of the allied health sciences, and physicians.

W. D. SNIVELY, JR., M.D.
Evansville
Internal Medicine

PRE-REGISTER NOW

MEDICLINICS

POSTGRADUATE MEDICAL REFRESHER COURSE

FORT LAUDERDALE, FLORIDA

MARCH 3-14, 1980

OUTSTANDING FACULTY

CHARLES E. AUCREMANN, M.D.
Chairman, CME Committee, F.A.F.P.
Associate Professor, Family Medicine,
College of Medicine
University of South Florida

HAROLD F. BUCHSTEIN, M.D.
Clinical Professor of Neurological Surgery
University of Minnesota

LOUIS P. DEHNER, M.D.
Associate Professor of Laboratory Medicine
and Pathology
University of Minnesota

MR. KARL DIESSNER, L.L.B.
Mediclinics Legal Counsel
Minneapolis, Minnesota

ROBERT S. DOBRIN, M.D.
Pediatric Critical Care Center
Oakland, California

EVERETTE J. DUTHOY, M.D.
Secretary, North Central Section
American Urological Association

THOMAS F. FERRIS, M.D.
Professor and Chairman
Department of Medicine
University of Minnesota

WILLIAM C. GENTRY, JR., M.D.
Assistant Professor
Department of Dermatology
University of Minnesota

STANLEY M. GOLDBERG, M.D.
Clinical Professor of Surgery
Division of Colon and Rectal Surgery
University of Minnesota

JOSEPH W. GOLDSMITH, M.D., F.A.C.O.G.
Fort Lauderdale, Florida

ROBERT A. GOOD, M.D.
President and Director
Sloan Kettering Institute
New York City, New York

DONALD R. LANNIN, M.D.
Secretary,
Mediclinics International Medical Seminars

KENNETH L. MELMON, M.D.
Chairman, Department of Medicine
Stanford University School of Medicine
Stanford, California

WILLIAM L. MEYERHOFF, M.D.
Associate Professor
Department of Otolaryngology
University of Minnesota

ALFRED F. MICHAEL, M.D.
Professor, Department of Pediatrics
University of Minnesota

JOHN S. NAJARIAN, M.D.
Professor and Chairman
Department of Surgery
University of Minnesota

RUDI SCHMID, M.D.
Professor, Department of Medicine
University of California
San Francisco, California

HOWARD M. SPIRO, M.D.
Head, Section of Gastroenterology
Yale University School of Medicine
New Haven, Connecticut

CYRUS WOLFMAN, M.D.
Director, Department of Psychiatry
Brookdale Hospital Medical Center
Brooklyn, New York

"This program is acceptable for 50 Prescribed Hours by the American Academy of Family Physicians. As an organization accredited for continuing medical education, the Florida Academy of Family Physicians designates this program as meeting the criteria for 50 credit hours in Category I of the Physician's Recognition Award of the American Medical Association. This program also is acceptable for 50 Mandatory hours by the Florida Medical Association.

PRE-REGISTRATION — $325.00 (Until February 15, 1980)

MEDICLINICS
832 Central Medical Building
Saint Paul, Minnesota 55104
PHONE: 612-646-4037

EXCELLENT FACULTY, FINEST HOTEL
PEAK OF WINTER SEASON

BOOK REVIEWS

Antidepressant Treatment—The Essentials

John H. Greist, M.D. and Thomas H. Greist, M.D. Copyright 1979, The Williams and Wilkins Company, Baltimore, Md 21202. Paperbound, 235 pages, $9.95.

This small and concise book should be helpful to all practicing physicians who must deal with depressed patients. The book undertakes to describe recent developments in diagnosis of depression. It also helps clarify the seeming dichotomy between psychotherapy and antidepressant medications used in treatment.

The book is divided into three main parts: Introduction, diagnosis and treatment.

The introduction discusses various theoretical issues, epidemiology and nomenclature.

Under diagnosis the following items are discussed: Depression questionnaires, how to proceed with diagnosis, *Diagnostic and Statistical Manual,* delusions, memory loss, atypical depression, post-psychotic depression, schizo-affective disorder, suicide risk, masked depression and secondary depression.

The treatment section discusses: Treatment selection, use of referral, children, older patients, compliance-adherence, tricyclics, monamine oxydase inhibitors, Lithium, major tranquilizers, stimulants, other drug treatments, electroconvulsive therapy, psychosurgery, sleep deprivation, jogging-running, supportive and dynamic psychotherapies, and behavioral psychotherapies.

The chapter on delusions emphasizes that delusions in depression are affective and mild and not bizarre delusions as are found in schizophrenia. The memory loss chapter reminds physicians that memory loss in depression is milder and less blatant than that found in organic brain disease. The chapter on masked depression is likewise pertinent and expressive.

The compliance-adherence chapter is up to date and complete; I wish a little more emphasis had been placed on physician attitudes as related to patient outcome, however. The monamine oxydase inhibitors chapter laments the "bad press" which this drug classification had received. It points out that the risk of no therapy (suicide risk) is much greater than that of therapy, even monamine oxydase inhibitor therapy. The chapter on jogging-running presents a small study which indicates that this exercise may be helpful in management of depression.

The foreword compares the progress made in detection and treatment of hypertension with that of detection and treatment of depression.

I feel this small book will be of use to practicing physicians. It is concise, understandable and well organized. Medical students and residents will also find it helpful in covering this problem in patients.

ALVIN J. HALEY, M.D.
Fort Wayne
Family Practice

Artificial Cardiac Pacing: Practical Approach

Edited by E. K. Chung. Copyright 1978, Williams & Wilkins Co., 391 pages with illustrations, $34.

Patients need pacemakers for at least four different reasons: 1) to prevent bradycardia, 2) to augment cardiac output, 3) to overdrive—suppress arrhythmias, and 4) to interrupt ectopic rhythms. Unfortunately, no single type of pacer subserves all these functions. For example, patients with sick sinus syndrome plus brady-tachyarrhythmias, or those who need the atrial contribution to cardiac output, are probably best treated with an atrio-ventricular sequential pacemaker rather than the usual ventricular demand model. Whether it is pacer selection, or Ashman's phenomenon, or the Wedensky effect, or simply the indications for implanting a prophylactic pacer, this book updates every topic relevant to cardiac pacing.

Consultants will find several chapters—e.g., those on electrode design, His' bundle electrocardiography, and the role pacing plays in understanding impulse initiation—that measure up to their level of expertise. Particularly good essays explain how to recognize pseudomalfunction, and how to distinguish myocardial infarction from "the pacemaker T-wave syndrome." The sections on complications and on diagnosing digitalis toxicity during artificial pacing also will appeal to specialists.

Ways to decide difficult questions, such as how to differentiate between ventricular tachycardia and supraventricular tachycardia with wide QRS complexes, are given as well. Many chapters, however, remain so basic and practical that generalists will gain a great deal of useful information from them. For example, under the heading "pacemaker interference," it is disclosed that airport weapon-detectors cause pacemakers to revert to asynchronous function in 10% of walk-throughs. Besides the subject of post-implant care and advice, other topics of obvious medical-legal importance to family practitioners, such as when pacer implantation must be expedited, are reviewed. This well balanced text thus successfully bridges the generalist-specialist gap. It promises something of value for all interested physicians and coronary care nurses.

ALAN T. MARTY, M.D.
Evansville
Cardiovascular Surgeon

CME QUIZ

Scoliosis and the Family Physician

CONTINUED FROM PAGES 833-838

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana University School of Medicine, Division of Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46223.**

1. In the United States, the most frequently observed type of scoliosis is:
 a. Infantile idiopathic scoliosis
 b. Juvenile idiopathic scoliosis
 c. Adolescent idiopathic scoliosis
 d. Neuromuscular scoliosis
 e. Congenital scoliosis
2. Treatment of an immature 14-year-old girl who presents with a 16 degree right thoracic scoliosis curve should include which of the following?
 a. Observation at four-month intervals with appropriate x-rays.
 b. Immediate brace application until skeletally mature, wearing the brace 23 hours per day.
 c. Harrington instrumentation and posterior spinal fusion.
 d. Exercises alone.
 e. Milwaukee brace during the sleeping hours and exercises during the waking hours.
3. Upon examination of the child for possible scoliosis, which of the following are significant indicators of spinal deformity?
 a. Asymmetrical breast size.
 b. Unequal shoulder heights.
 c. Asymmetrical waist creases.
 d. None of the above.
 e. All of the above.
4. If one suspects scoliosis during a screening examination, the next logical step in the work-up of the patient would include:
 a. Re-examination at four-month intervals.
 b. Chest x-ray.
 c. Supine scoliosis x-ray (occiput to sacrum).
 d. Standing scoliosis x-ray (occiput to sacrum).
 e. Complete scoliosis series, including AP, lateral, obliques, right and left bending x-rays of the spine.
5. Given a 30-year-old female patient with an untreated thoracic scoliosis of greater than 60 degrees, which of the following statements is most likely true?
 a. Her curve will progress predictably during the next 20 years.
 b. She has measurable differences in her actual pulmonary function test than her predicted pulmonary function results.
 c. If she should become pregnant, she has an increased risk of progression of her spinal deformity.
 d. None of the above.
 e. All of the above.
6. Examination of the spine of a *preschooler* should be performed:
 a. In the supine position.
 b. In the suspended position.
 c. In the sitting position.
 d. In the standing position.
 e. In the prone position.
7. The forward bending test:
 a. Is of little value in nonambulatory patients.
 b. Is only good if positive.
 c. Is frequently inaccurate.
 d. Is the best way to quickly find a thoracic curve.
 e. Is only valuable in preschool children.

CONTINUED ON PAGE 862

Answers to the CME quiz that appeared in the October issue of THE JOURNAL: "Small Airways Disease: The Bottom of the Iceberg," by Stephen J. Jay, M.D.

. c	6. True
. c	7. False
. c	8. True
. d	9. True
. a	10. False

Answer sheet for Quiz: (Scoliosis . . .)

1. a b c d e	6. a b c d e
2. a b c d e	7. a b c d e
3. a b c d e	8. a b c d e
4. a b c d e	9. a b c d e
5. a b c d e	10. a b c d e

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in the next issue of THE JOURNAL for my information.

Name (please print or type)

Address

Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before Dec. 10, 1979, to the address appearing at the top of this page.

FUTURE FILE

Michigan CME Offering

The following courses are sponsored by the University of Michigan Medical School and meet criteria for Category 1 credit. For further information, contact the university's Department of Postgraduate Medicine and Health Professions Education, The Towsley Center for Continuing Medical Education, Ann Arbor, Mich. 48109.

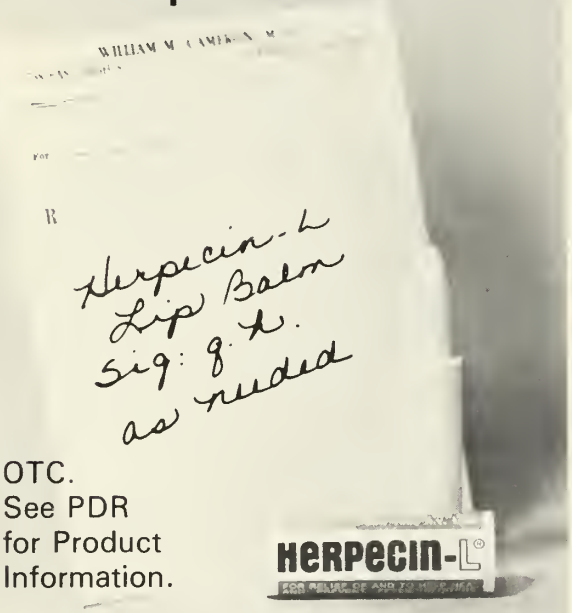
Dec. 7: Care of the Burned Patient;
Jan. 16: Today's Physician and the Homosexual;
Feb. 3-8: Midwinter Family Practice Update;
Feb. 18-22: Emergency Medicine;
Feb. 26-27: Topics in Adult Psychiatry.

Critical Care Symposia

The Society of Critical Care Medicine will conduct symposia in 1980 at San Antonio (May 12-16), Washington, D.C. (May 25-29) and St. Louis (May 24-28).

Write to Norma Shoemaker, RN, MN, Box 3158, Anaheim, Calif. 92803.

Dx: recurrent herpes labialis



OTC.
See PDR
for Product
Information.

For samples, write Dept. F at:

CAMPBELL LABORATORIES, INC.
P.O. Box 812, FDR, N.Y., N.Y. 10022

"Herpecin-L" Lip Balm is available at all Haag Drug Stores and other select pharmacies.

Fort Wayne Society's Program

The Fort Wayne Medical Society's Committee on Postgraduate Medical Education has launched its annual program with a variety of offerings that meet criteria for Category 1 credit.

Seven classes will be offered from now through May in the regular program, and seven others are being offered under the Society's Visiting Professorship Series.

For details, contact the Fort Wayne Medical Society, 2414 E. State, Suite 303, Fort Wayne, Ind. 46805.

Conference on Rural Health

Seven CME courses placing emphasis on the needs of the rural practitioner will be offered in conjunction with the AMA's 33rd National Conference on Rural Health, scheduled for April 17-18 at the Sheraton Boston in Boston.

CME courses meet the criteria for Category 1 accreditation on an hour-for-hour basis for the Physician Recognition Award of the AMA.

For information, contact the Department of Community Health Systems, AMA, 535 N. Dearborn St., Chicago 60610.

CME in the Caribbean

"Infectious Diseases Today" is the subject of a CME course to be conducted Feb. 9-16 by Wayne State University School of Medicine on a Caribbean cruise ship, the TSS Festivale. Credit for 36 prescribed hours with AAFP and 36 hours Category I will be given.

For information write Division of Continuing Medical Education, 1206 Scott Hall, Detroit, Mich. 48201, or call (313) 577-1180.

OB-GYN Symposium

The 16th Annual OB-GYN Symposium, sponsored by the Indiana Academy of Family Physicians and the Indiana Section, American College of Obstetricians and Gynecologists, will be held Dec. 1-2 at the Airport Holiday Inn, Indianapolis.

The program is acceptable for 10 prescribed hours by the AAFP and for 10 credit hours in Category 1 of the AMA's Physician's Recognition Award.

To register and for more information, contact the Indiana Academy of Family Physicians, 4847 S. High School Road, Indianapolis 46241.

CONTINUED ON PAGE 860



Tagamet®

brand of

cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

When painful spasm is the presenting symptom...



..in the functional bowel/irritable bowel syndrome*

Bentyl®

(dicyclomine hydrochloride USP)

10 mg. capsules, 20 mg. tablets,
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity with minimal anticholinergic side effects†

Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

"The correlation of spasm relief and drug given was excellent."

*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:
King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

Merrell

8-4420 (Y736A) MNR-804

Bentyl®

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

CONTRAINDICATIONS: Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. WARNINGS: In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. PRECAUTIONS: Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. ADVERSE REACTIONS: Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia, increased ocular tension, loss of taste; headache, nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. DOSAGE AND ADMINISTRATION: Dosage must be adjusted to individual patient's needs.

Usual Dosage: Bentyl 10 mg. capsule and syrup: *Adults*: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children*: 1 capsule or teaspoonful syrup three or four times daily. *Infants*: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults*: 1 tablet three or four times daily. Bentyl Injection. *Adults*: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE: The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine® (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

FUTURE FILE

CONTINUED FROM PAGE 856

'Costs and Ethical Issues'

"Costs and Ethical Issues" will be the main subject of the 3rd Annual Mid-America Conference on Health Care to be held at the University of Kansas in Lawrence Friday, Dec. 7. Nationally known speakers will be questioned by expert reaction panels, and debates will be held on key issues.

Write to John H. Harvey, MPH, Ph.D., University of Kansas, Lawrence, Kan. 66045.

Graduate Medical Assembly

The 43rd Annual New Orleans Graduate Medical Assembly will be held Feb. 27 through March 2 at the Fairmount Hotel in New Orleans.

Preliminary program is available on request to Tulane Medical Center, Room 1538, 1430 Tulane Ave., New Orleans, La. 70112.

Kentucky CME Courses

The University of Kentucky College of Medicine announces the following courses:

Feb. 15-16: Fiberoptic Bronchoscopy: A Workshop, Session II;

Feb. 24-29: 11th Family Medicine Review, Session I;

May 11-16: 11th Family Medicine Review, Session II;

June 8-13: 11th Family Medicine Review, Session III.

All classes will be conducted at the Hyatt Regency Hotel, Lexington, Ky.

For information, contact Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Ky. 40536.

Postgrad Course in Milwaukee

The Medical College of Wisconsin in Milwaukee will conduct its 13th annual postgraduate course in Gynecological Pathology, Cytogenetics and Endocrinology Jan. 3-9, 1980 at the Pfister Hotel and Tower, Milwaukee.

The six-day course has been extended to include a complete up-to-date review of endocrinology and cytogenetics. It is limited to 150 registrants. A $450 enrollment fee will include 68 selected 35 mm slides. The fee is non-refundable. Approved for 55 cognate hours with ACOG and 43 hours in Category 1 for the PRA.

Write to Richard F. Mattingly, M.D., 8700 W. Wisconsin Ave., Milwaukee, Wis. 53226.

CME QUIZ

Secondary Somatic Problems: Part 2

CONTINUED FROM PAGES 846-848

TO OBTAIN ONE HOUR OF CATEGORY 1 AMA CME CREDIT, answer the following questions by circling the correct answer on the answer sheet below. Complete and clip the application form and mail it to: **Indiana University School of Medicine, Division of Continuing Medical Education, 1100 W. Michigan St., Indianapolis 46223.**

ANSWER THE FOLLOWING QUESTIONS:

1. The hysteric is
 a. withdrawn and dull
 b. usually very ill and morbid
 c. dramatic and theatrical

2. The hypochondriacal person
 a. wants to be cured
 b. is concerned about his diagnosis
 c. is uninvolved with his complaints

3. The hypochondriacal person
 a. should be referred to a psychiatrist
 b. should be referred to a surgeon for definitive treatment
 c. should be allowed to keep his complaints and still see his primary physician

4. The hypochondriacal person frequently
 a. gets worse if pressured to be well
 b. always gets better with medical treatment
 c. has rare medical-surgical illness

5. The hysterical person
 a. is always very compliant and cooperative
 b. frequently "professional shops"
 c. is very sincere and involved with physical complaints

6. Hypochondriasis is reflective of
 a. a psychosis
 b. a liar
 c. a need for attention

Answers to the CME quiz that appeared in the October issue of THE JOURNAL with Part 1, Secondary Somatic Problems, by David F. Wehlage, M.D.

1. b	4. c
2. b	5. b
3. a	6. a

Answer sheet for Quiz:
(Secondary Somatic Problems: Part 2)

1. a b c	4. a b c
2. a b c	5. a b c
3. a b c	6. a b c

I wish to apply for one hour of category 1 AMA Continuing Medical Education credit through the I.U. School of Medicine. I have read the article and answered the quiz on the answer sheet above. I understand that my answer sheet will be graded confidentially, at no cost to me, and that notification of my successful completion of the quiz (80% of the questions answered correctly) will be directed to me for my application for the Physician's Recognition Award of the American Medical Association. I also understand that if I do not answer 80% of the questions correctly, I will not be advised of my score but the answers will be published in the next issue of THE JOURNAL for my information.

Name (please print or type)

Address

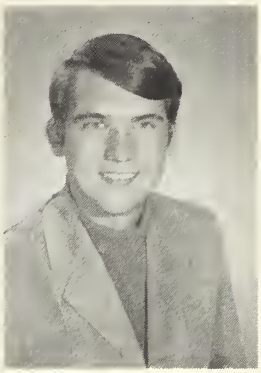
Identification number (found above your name on mailing label)

Signature

To be eligible for credit for this month's quiz, send your completed, signed application before Dec. 10, 1979, to the address appearing at the top of this page.

NEWS NOTES

Wilhelmus on Fellowship in England



Dr. Kirk R. Wilhelmus, son of former ISMA president Dr. Gilbert M. Wilhelmus of Evansville, has received a one-year Fellowship in Corneal Disease at Moorfields Hospital, London. The Fellowship is sponsored by the International College of Surgeons and the Royal Society of Medicine.

The younger Wilhelmus is a 1971 graduate of Indiana University. He earned his M.D. degree from Vanderbilt University in 1975.

Dr. Wilhelmus completed a residency in Opthalmology at Baylor College of Medicine, Houston, Texas, where he served as Chief Resident for 1978-79. During his residency, he received the Goor Research award for work on ocular infectious diseases.

HANGER'S NETWORK OF PROSTHETIC CARE= ADDED SECURITY

Understandably, the assurance that proper prosthetic care will be available when and where it is needed is of great concern to wearers of prostheses.

HANGER, makers of quality prostheses, provides a country-wide network of convenient offices where complete adjustment, repair and consultation services are available. Each HANGER office is staffed with one or more certified Prosthetists and contains a full line of HANGER Standard Parts and supplies to insure the same high quality prosthetic service as was obtained at the original HANGER location.

In keeping with the tradition of quality Prosthetic service, every HANGER office is proud to honor the guarantee furnished by every other HANGER office.

In Today's mobile society, for convenience and for quality, HANGER is the leading name in Prostheses.

Hanger PROSTHETICS

1332 N. Illinois St., Indianapolis, Indiana 46202
312 E. McMillan St., Cincinnati, Ohio 45219
416 N. Main Street, Evansville, Indiana 47711
3004 S. Wayne Ave., Fort Wayne, Ind. 46807

Annual Journalism Awards

Four Indiana newswomen swept the annual ISMA Journalism Awards competition this year.

Receiving the awards during last month's annual convention in Indianapolis were:

Broadcast Category (Single Topic): Marilyn Moran Townsend, WKJG-TV, Fort Wayne, winner of the 1978 ISMA broadcast journalism award—Half-hour documentary, "Death With Dignity," also named Best Documentary of 1979 by the Associated Press. The documentary discussed the Fort Wayne hospice program and its role in helping a leukemia patient and his wife prepare at home for his death.

Broadcast Category (Series): Carol Krause, WISH-TV, Indianapolis—Five-part series, "Children and Cancer," which covered medical advances in cancer treatment and the emotional issues that must be treated by the physician and hospital staff.

Print Category (Single Topic): Brenda Batten, INDIANAPOLIS NEWS—"Death Doesn't Still Victim's Message," based on an interview she conducted with a cancer patient shortly before the patient died.

Print Category (Series): Barbara Rene Ford, KOKOMO TRIBUNE, now associate women's editor of the JOURNAL AND ENTERPRISE, Beaumont, Texas—six-part series, "From Ostomy Onward." The series dealt with ostomy patients and the Kokomo Ostomy Association.

The journalism awards are presented each year at the annual convention of the ISMA following a review of material submitted by the news media through county medical societies to the ISMA Commission on Public Relations.

CME QUIZ: Scoliosis

CONTINUED FROM PAGE 855

8. A 14-year-old skeletally immature girl is found on school screening to have a 55 degree right thoracic curve. The *ideal* treatment for this otherwise *normal* patient would be:
 a. No therapy as she does not need it.
 b. Milwaukee brace full-time.
 c. Milwaukee brace during sleeping hours.
 d. Harrington instrumentation and posterior spinal fusion.
 e. Exercise program.
9. The "goal of treatment" in scoliosis is to:
 a. Achieve a completely straight spine.
 b. Prevent further progression of the curve.
 c. Preserve the height of the patient.
 d. Obtain a cosmetically pleasing result.
 e. Brace all curves effectively.
10. School screening for scoliosis:
 a. Requires a significant amount of time and expense.
 b. Requires an orthopedic surgeon to screen all children.
 c. Should be an ongoing event each year on the school calendar.
 d. Is a waste of time.
 e. Embarrasses the children.

NEWS NOTES

50-Year Club Members

The following Indiana physicians should have been included in the list of new ISMA 50-Year Club members that appeared on Page 679 of the September issue of THE JOURNAL:

Vigo County—Dr. Noel S. McBride, Terre Haute.

Wayne-Union County—Dr. Willoughby M. Barton, Centerville; Dr. Charles E. Kenyon, Cambridge City; and Dr. William B. McWilliams, Liberty.

Toll-Free Reporting Of Drug, Device Problems

DHEW announces that physicians may dial a toll-free number to report problems with drugs, medical devices, and *in vitro* diagnostic products. The number is 800-638-6725.

The FDA encourages reports on hazardous or potentially hazardous products, product mislabeling or improper labeling, incomplete or confusing instructions, erroneous information, designs that encourage human error, performance failures, non-sterile products, packaging errors, defective components, quality control problems, and any other situation that could affect the safety and efficacy of a product.

Cushing Memorial Fellowship

A Fellowship in Surgery for International Study has been given to The Society of the New York Hospital in memory of Dr. Harvey Cushing and his wife. Gifts and bequests from the three Cushing daughters, Betsey Cushing Whitney, Mary Cushing Fosburgh and Barbara Cushing Paley, created the Fellowship.

The Cushing Fellowship will consist of a Cushing Senior Fellow, a chief resident surgeon or a senior established investigator of unusually promising skills, and, if resources permit, up to two Cushing Junior Fellows.

Training Opportunities

Training opportunities for obstetricians and pediatricians in the Maternal and Child Health Program of the University of California at Berkeley are now open for applications for September 1980. Tax-exempt Fellowships are available. The programs vary in length from 9 months to 3 years.

For complete information write Helen M. Wallace, M.D., Department of Maternal and Child Health, University of California School of Public Health, Berkeley 94720.

Osteopaths May Join AMA

Delegates of the American Osteopathic Assn. have voted to allow their members to join the AMA and specialty societies outside the osteopathic profession.

AOA President Dale Dodson, D.O., said the abrupt policy shift was the result of growing confidence. "We know that the pluralism between osteopathic and allopathic medicine is going to be maintained," he said. "We have outgrown our paranoia about being swallowed up by the AMA."

White House Fellowships

U.S. citizens who are in the early and formative years of a career or profession are eligible to apply for White House Fellowships.

The program is designed to provide gifted and highly motivated Americans, early in their careers, firsthand experience in the process of governing the nation, and a sense of personal involvement in the leadership of the society.

Application materials and additional information are obtainable from the President's Commission on White House Fellowships, P.O. Box 7737, Washington, D.C., 20044. Requests for applications must be postmarked no later than Nov. 15. Completed applications must be returned with a post mark no later than Dec. 1.



McClain Car Leasing, Inc.

1745 Brown St., Anderson, Ind.

Phone 317/642-0261

Specializing in Professional Car Leasing

ALL MAKES AND MODELS AVAILABLE

We are proud to offer a Leasing Plan approved by ISMA

NEWS NOTES

Evansville FP Receives Annual 'Physician Community Service Award'



Ray W. Nicholson, Jr., M.D.

Dr. Ray W. Nicholson, Jr., an Evansville family practitioner, received ISMA's annual "Physician Community Service Award" during last month's annual convention in Indianapolis.

The award is sponsored each year by the A. H. Robins Pharmaceutical Company of Richmond, Va.

Dr. Nicholson was credited with increasing public understanding of the complexities of medical education and practice in Evansville.

Dr. Nicholson, 49, is a member of the Vanderburgh County Medical Society, of which he was president from 1975-76. During his presidency, he prepared a slide presentation entitled "Evansville: A Medical Center." Since then, he has devoted himself to informing the community about health and medical care available in Evansville by personal appearances at more than 50 civic organization meetings and by editorials every 10 days on "Focus," a citizens' forum produced daily by WGBF radio in Evansville. His editorial topics have included disease entities, the education of physicians, government in medicine, and good health habits.

An active member of St. Mary's Hospital staff, of which he served as president in 1974, Dr. Nicholson has been director of the family practice residency program there since 1958. He is a member of the American Academy of Family Physicians, the Society of Teachers of Family Medicine, and, from 1974-77, served on the I.U. School of Medicine Board of Directors, of which he was president last year.

Dr. Nicholson, a 1955 graduate of the I.U. School of Medicine, currently is an associate clinical professor of family medicine at the I.U. School of Medicine, Evansville.

IMMKE CIRCLE LEASING INC

Endorsed Leasing Company
Of The Indiana State Medical Association

Order now for early delivery on 1980 models.

We lease all foreign and domestic makes and models including Mercedes, Jaguar, Porche, BMW, etc.

Many people think of leasing as just automobiles. We do that too, but, in addition we want to lease you any professional equipment that can be depreciated.

Immke Circle Leasing Inc.
32 South Fifth Street
Columbus, Ohio 43215

Call Collect
317-472-3594
or TOLL FREE
1-800-848-3530

The Latest on Darvon®

Eli Lilly and Company has cooperated with federal agencies in reviewing the clinical use and drug cross-reactions of Darvon® and its compounds.

Both DHEW and FDA have found that severe reactions to Darvon have been due to improper use and to reactions between Darvon and other drugs such as tranquilizers, sleep aids, anti-depressant drugs and alcohol. The recommendations were to the effect that more public information should be dispensed concerning the dangers of mixing drugs. The company has prepared a warning pamphlet for physicians' use. It also has published a booklet that deals with emergency management of overdosage. In addition, patient information sheets and prescription vial stickers for use by physicians and pharmacists are available on request to the company at Indianapolis.

I.U. Educator Honored

Dr. George Weber, professor and director of the Laboratory for Experimental Oncology at the I.U. School of Medicine, recently received the honorary degree of Doctor of Medicine and Surgery from the University of Chieti in Italy. He was honored for his discoveries about the hormonal regulation of enzyme activity, for his introduction of the molecular correlation concept, and for his elucidation of the biochemical pattern of cancer cells.

NEWS NOTES



IF I WANTED A CAT SCAN,
I WOULD HAVE GONE TO A VETERINARIAN!

Canadians Propose Rules For Artificial Sweetener

Canadian health officials have issued proposed regulations for the sweetener aspartame, a substance developed by G. D. Searle & Company as an artificial sweetener.

Final regulations will be issued after a 90-day period, set aside for comments.

AMA Withdraws from LCCME

At its annual meeting in July, the AMA House of Delegates backed the Council on Medical Education and Board of Trustees and withdrew from the Liaison Committee on Continuing Medical Education.

The AMA will resume its role as a primary accreditor of CME-sponsoring organizations by establishing a committee of the council. Continuing medical education accreditation was conducted by the AMA for more than a decade before LCCME took over in 1977. The AMA has provided staff for the LCCME and, through 1978, all the costs of accreditation.

The House action recognizes state medical associations as the accrediting bodies for institutions and organizations providing local and intrastate CME programs.

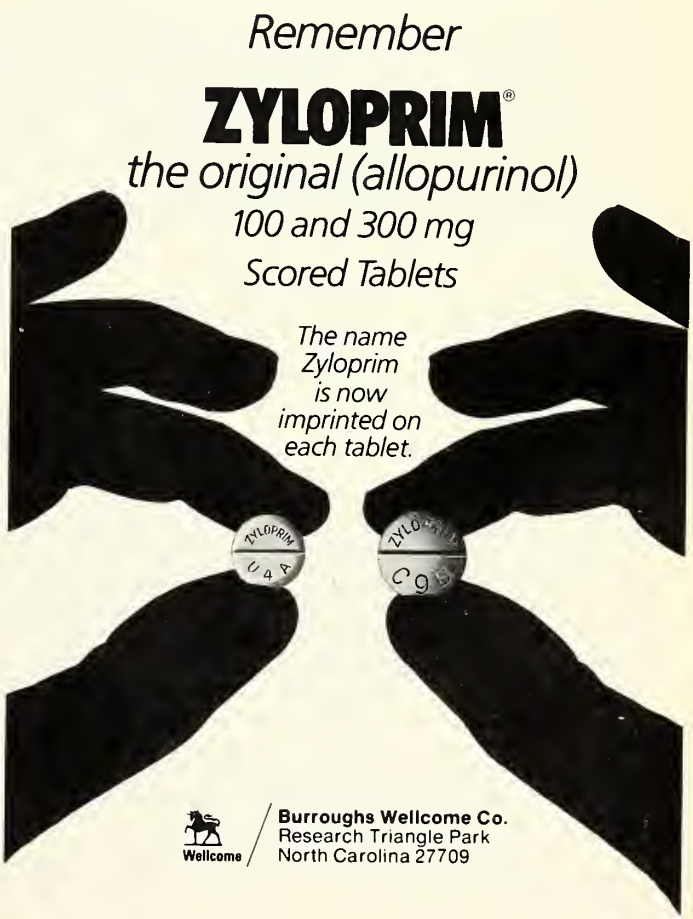
Roche Emphasizes: Alcohol + Drugs = Danger

Roche Laboratories, a leading manufacturer of prescription drugs, is cautioning the elderly that mixing alcohol with some medications can spell disaster, according to AMEP-O-GRAM, the newsletter of the Addiction Medical Education Program in Evansville.

Roche's warning is being televised and carried in widely read media, such as TV GUIDE and READER'S DIGEST. The basis for the company's program rests on clinical studies that show mixing alcohol with medications is one of the most frequent problems involving drug use by the elderly.

Not content with advertising alone, Roche is disseminating thousands of information kits to elderly persons via their doctors and pharmacists. In addition, 21 million booklets dealing with medication problems of the elderly have been printed.

Additional information can be obtained from Ann Biedenweg, Social Science Dept., Roche Laboratories, Division of Hoffman-LaRoche, Inc., Nutley, N.J. 07110.



PHYSICIANS' DIRECTORY

ALCOHOLISM TREATMENT

GERALD P. JOHNSTON, M.D.
BRADLEY N. BOEN, M.D.
THOMAS L. McCONNELL, M.D.
HAROLD G. NICHOLS, M.D.

Comprehensive Alcoholism Treatment

Fairbanks Hospital
1575 Northwestern Avenue
Indianapolis, Ind. 46202

(317) 638-1574

DAVID L. PHILLIPS, M.D.
JOHN J. SAALWAECHTER, M.D.
BEN H. PARK, M.D.
RITCHIE COONS, M.D.
Individualized Treatment for Alcoholism

KOALA CENTER



1711 Lafayette Avenue
Lebanon, Indiana 46052

(317) 482-3711

HAND SURGERY

By oppointment Phone 317-783-1319
VIDYASAGAR S. TUMULURI, M.D., F.A.C.S., INC.
Diplomate American Board of Surgery
Acute & Reconstructive Hand Surgery
General Surgery
3530 S. Keystone, Suite 305 Indianapolis 46227

COLON AND RECTAL SURGERY

VINCENT C. SCUZZO, M.D., F.A.C.S.
Certified: American Board of Colon and Rectal Surgery
Associate Fellow: American Society of Colon and Rectal Surgeons
Specializing in Colon and Rectal Surgery
214 Sherland Building
105 East Jefferson Blvd. South Bend, Ind. 46601

PSYCHIATRY

GORDON T. BROWN, M.D.
Diplomate, American Board of Psychiatry and Neurology
Adult and Adolescent
Psychotherapy, Consultation, Evaluation
Tel: (317) 923-3269
3266 North Meridian Street Indianapolis 46208

OPHTHALMIC PLASTIC SURGERY

Robert D. Deitch, M.D., F.A.C.S.

Fellow of the American Association of
Ophthalmic Plastic and Reconstructive Surgery

St. Francis Medical Arts Building
1500 Albany Street Suite 801
Beech Grove, Indiana 46107

PHONE ANSWERED 24 HOURS (317) 783-6187

INTERNAL MEDICINE

NEPHROLOGY & INTERNAL MEDICINE, INC.

Daniel J. Aheam, M.D.
Thomas Wm. Alley, M.D., FACP
George W. Applegate, M.D.
Charles B. Carter, M.D.
William H. Dick, M.D., FACP
Theodore F. Hegeman, M.D.
Douglas F. Johnstone, M.D.
LeRoy H. King, Jr., M.D., FACP

2020 W. 86th St., #307, Indianapolis 46260 Ph: 317-844-9911
1633 N. Capitol, #722, Indianapolis 46202 Ph: 317-926-0757

Answering Service 926-3466

CLINICAL NEPHROLOGY, RENAL TRANSPLANTATION, HEMODIALYSIS, PERITONEAL DIALYSIS, HYPERTENSION, FLUID AND ELECTROLYTE IMBALANCE, CRITICAL CARE.

CLINICAL, ANATOMIC PATHOLOGY

THE MEDICAL LABORATORY

OF

DRS. THORNTON, HAYMOND, COSTIN, BUEHL, BOLINGER & WARNER

301 EAST 38TH ST., INDIANAPOLIS, INDIANA 46205

Phone: (317) 925-6466

COMPLETE LABORATORY SERVICES

H. C. Thornton, M.D. (1902-1978)
J. L. Haymond, M.D., F.C.A.P.
R. L. Costin, M.D., F.C.A.P.
I. A. Buehl, M.D., F.C.A.P.
G. L. Bolinger, M.D., F.C.A.P.
T. M. Warner, M.D., F.C.A.P.
F. D. McGovern, Jr., M.D., F.C.A.P.
R. O. McClure, M.D., F.C.A.P.
R. P. Hooker, M.D., F.C.A.P.

- MICROBIOLOGY
- SEROLOGY
- CHEMISTRY
- SURGICAL PATHOLOGY
- HEMATOLOGY
- COAGULATION
- FORENSIC
- CYTOLOGY
- EKG
- VETERINARY PATHOLOGY
- TOXICOLOGY
- HOUSE CALL PHLEBOTOMY
- COURIER SERVICES

CLINICAL AND ANATOMIC PATHOLOGY

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

CARDIOLOGY

WILLIAM K. NASSER, M.D.
MICHAEL L. SMITH, M.D.
CASS A. PINKERTON, M.D.

are pleased to announce the addition of

JAMES W. VAN TASSEL, M.D.

for the practice of cardiology and cardiac catheterization

8402 Harcourt Road, Room 413 Indianapolis 46260
St. Vincent's Professional Building (317) 257-9316

Physician Referral Only

NEUROSURGERY

By Appointment Phone 925-4255

C. BASIL FAUSSET, M.D.
Neurological Surgery

1815 North Capitol Avenue Indianapolis 46202

By appointment only Phone 317-353-6800

BIO MEDICAL LABORATORY
5506 East 16th St., Suite 24
Indianapolis 46218
Bio-Feedback Training for Migraine and Tension Headache
KARL L. MANDERS, M.D.
JOHN S. MARKS, JR., M.D. MALCOLM S. SNELL, M.D.

$120 per year will keep your name before the medical profession in this space for one year. For information contact THE JOURNAL, 3935 N. Meridian St., Indianapolis 46208.

U.S. POSTAL SERVICE

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

(Required by 39 U.S.C. 3685)

1. TITLE OF PUBLICATION	A. PUBLICATION NO.	2. DATE OF FILING
THE JOURNAL of the Indiana State Medical Association	2 8 4 4 4 0	Sept 17, 1979
3. FREQUENCY OF ISSUE: Monthly	A. NO. OF ISSUES PUBLISHED ANNUALLY: 12	B. ANNUAL SUBSCRIPTION PRICE: $14.00

4. LOCATION OF KNOWN OFFICE OF PUBLICATION *(Street, City, County, State and ZIP Code) (Not printers)*
3935 N. Meridian St., Indianapolis, Marion, Indiana 46208

5. LOCATION OF THE HEADQUARTERS OR GENERAL BUSINESS OFFICES OF THE PUBLISHERS *(Not printers)*
3935 N. Meridian St., Indianapolis, Marion, Indiana 46208

6. NAMES AND COMPLETE ADDRESSES OF PUBLISHER, EDITOR, AND MANAGING EDITOR

PUBLISHER *(Name and Address)*
Indiana State Medical Association, 3935 N. Meridian St., Indpls, IN 46208

EDITOR *(Name and Address)*
Frank B. Ramsey, M.D., 3935 N. Meridian St., Indianapolis, IN 46208

MANAGING EDITOR *(Name and Address)*
Martin T. Badger, 3935 N. Meridian St., Indianapolis, IN 46208

7. OWNER *(If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be giving. If the publication is published by a nonprofit organization, its name and address must be stated.)*

NAME	ADDRESS
Indiana State Medical Association	3935 N. Meridian St., Indianapolis, IN 46208
Non-profit corporation, no stockholders	

8. KNOWN BONDHOLDERS, MORTGAGEES, AND OTHER SECURITY HOLDERS OWNING OR HOLDING 1 PERCENT OR MORE OF TOTAL AMOUNT OF BONDS, MORTGAGES OR OTHER SECURITIES *(If there are none, so state)*

NAME	ADDRESS
None	

9. FOR COMPLETION BY NONPROFIT ORGANIZATIONS AUTHORIZED TO MAIL AT SPECIAL RATES *(Section 132.122, PSM)*
The purpose, function, and nonprofit status of this organization and the exempt status for Federal income tax purposes *(Check one)*

[X] HAVE NOT CHANGED DURING PRECEDING 12 MONTHS [] HAVE CHANGED DURING PRECEDING 12 MONTHS *(If changed, publisher must submit explanation of change with this statement.)*

10. EXTENT AND NATURE OF CIRCULATION	AVERAGE NO. COPIES EACH ISSUE DURING PRECEDING 12 MONTHS	ACTUAL NO. COPIES OF SINGLE ISSUE PUBLISHED NEAREST TO FILING DATE
A. TOTAL NO. COPIES PRINTED *(Net Press Run)*	5,491	5,550
B. PAID CIRCULATION 1. SALES THROUGH DEALERS AND CARRIERS, STREET VENDORS AND COUNTER SALES	None	None
2. MAIL SUBSCRIPTIONS	5,102	5,157
C. TOTAL PAID CIRCULATION *(Sum of 10B1 and 10B2)*	5,102	5,157
D. FREE DISTRIBUTION BY MAIL, CARRIER OR OTHER MEANS SAMPLES, COMPLIMENTARY, AND OTHER FREE COPIES	282	232
E. TOTAL DISTRIBUTION *(Sum of C and D)*	5,384	5,389
F. COPIES NOT DISTRIBUTED 1. OFFICE USE, LEFT OVER, UNACCOUNTED, SPOILED AFTER PRINTING	107	161
2. RETURNS FROM NEWS AGENTS	None	None
G. TOTAL *(Sum of E, F1 and 2—should equal net press run shown in A)*	5,491	5,550

11. I certify that the statements made by me above are correct and complete.

SIGNATURE AND TITLE OF EDITOR, PUBLISHER, BUSINESS MANAGER, OR OWNER
Donald F. Foy Business Manager

12. FOR COMPLETION BY PUBLISHERS MAILING AT THE REGULAR RATES *(Section 132.121, Postal Service Manual)*

39 U. S. C. 3626 provides in pertinent part: "No person who would have been entitled to mail matter under former section 4359 of this title shall mail such matter at the rates provided under this subsection unless he files annually with the Postal Service a written request for permission to mail matter at such rates."

In accordance with the provisions of this statute, I hereby request permission to mail the publication named in Item 1 at the phased postage rates presently authorized by 39 U. S. C. 3626.

SIGNATURE AND TITLE OF EDITOR, PUBLISHER, BUSINESS MANAGER, OR OWNER
Donald F. Foy Business Manager

(See instructions on reverse)

COMMERCIAL ANNOUNCEMENTS

Commercial announcements are carried in The Journal as a special service to ISMA members. Only advertisements considered by publisher to be of advantage to members will be accepted. Those of a truly commercial nature (i.e., firms selling brand products, services, etc.) will be considered for display type advertising.

Charges for commercial announcements are:

20¢ for each word
$4.00 minimum

Send check with order. Average count: seven words to the line.

Address: The Journal, ISMA, 3935 N. Meridian St., Indianapolis 46208.

DEADLINE: First day of month PRECEDING month of issue.

THE FORT WAYNE Medical Education Program, Fort Wayne, Ind., is accepting applications from individuals with competency in Family Practice Residency Training for the position of Director, Family Practice Residency. This is an excellent opportunity to combine teaching, patient care, and administrative duties with innovative educational and clinical programs. The Program utilizes the facilities of three community hospitals. We have recently moved into new facilities including a 24-exam-room Family Practice Center. Private patient privileges and salary are negotiable. Applicants must possess the M.D. degree, the ability to be licensed in Indiana and be Board Certified in Family Practice. Inquiries, credentials and a curriculum vitae with references should be mailed to: Sister M. Kathleen Quinn, Chairperson, Search & Screen Committee, Fort Wayne Medical Education Program, 2414 E. State Blvd., Fort Wayne, Ind. 46805.

OPHTHALMOLOGIST—Board certified/eligible to associate with Ophthalmologist in large Anterior Segment surgical practice. Can do Anterior Segment surgery as well as general ophthalmologic practice. Please forward Curriculum Vitae to Box 8708, Toledo, Ohio 43623.

INTERNIST, SOUTHEAST—Private practice opportunity in medium-sized city with new 150-bed hospital. Complete financial assistance. Family-oriented community. Send curriculum vitae in confidence to Mr. William Anderson, Search Director, 4470 Chamblee Dunwoody Road, Suite 350, Atlanta, Georgia 30338.

PHYSICIAN WANTED—Family physician to associate with established, incorporated, ABFP doctor. O.B. optional. Benjamin D. Bennett, M.D., 402 S. Berkley Rd., Kokomo, Ind. 46901. Tel: (317) 457-4416.

INTERNIST, board certified or eligible to locate practice in prosperous agricultural/industrial community. Modern hospital serves 50,000. Excellent educational and recreational facilities. Reply: Executive Director, Culver Union Hospital, Crawfordsville, Ind. 47933.

NEIGHBORHOOD HEALTH CENTER staffed by three full-time physicians has a part-time Medical Director position available. Flexible 20 hour/week responsibilities include direct patient care, staff consultation and administrative development of medical protocols. Competitive salary and benefits. Contact John Murphy, Administrator, People's Health Center, 1621 E. New York St., Indianapolis, Ind. 46201. (317) 633-7360.

OPHTHALMOLOGIST RETIRING. Wants to sell building and practice. Excellent real estate investment. In practice 31 years. 95% collection rate. Located in Jacksonville, Florida, Gateway City to Florida, and, its largest! Call (904) 398-0354 after 8:30 p.m.

EMERGENCY MEDICINE—Urbana, Illinois, Oct. 1, 1979: One director and two staff opportunities in 250-bed hospital emergency room seeing 10,000 annual patient visits. Twin-city university community just 125 miles from Chicago and Indianapolis, 175 miles from St. Louis. 48 hours per week/48 weeks per year. $55,000-$62,000 minimum guarantee, excellent professional liability coverage provided. Call Bill Salmo immediately at 1-800-325-3982 toll free.

SANIBEL ISLAND, FLORIDA—For rent: Beautifully furnished two-bedroom, two-bathroom condominium on the Gulf of Mexico. Screened porch. Sleeps up to six. Pool, tennis, and jacuzzi on premises. Golf courses nearby. Call (812) 332-5945 or (812) 339-6280.

Professional office space available in ideal west side Indianapolis Chapel Hill Professional Complex. 1240-3000 square feet. For information, call Mark Genung, (317) 271-1000.

INFORMATION WANTED: The Indiana Historical Society is conducting a project to locate and record archives and manuscripts in Indiana. This includes: 1. Personal correspondence between two or more individuals or between individuals and organizations. 2. Personal diaries and journals. 3. Records (account books, minutes, reports, correspondence) of businesses, organizations, associations, clubs, churches and similar groups. Anyone wishing to record such items is asked to contact Donald E. Thompson, Wabash College, Crawfordsville, Ind. 47933.

The Indiana Historical Society is gathering information for a third volume of Indiana authors. It will include the years 1967 through 1979 (or 1980) and the names of all those omitted from the first two volumes. To be eligible one must have been born in Indiana or lived in the state for a number of years, and must also have written a pamphlet or book. Contact Donald E. Thompson, Wabash College, Crawfordsville, Ind. 47933.



"Efficiency is the key to your practice"
Graduates of P. C. I. are thoroughly trained in the most up-to-date methods as Medical Assistants (AMA accredited) and Medical Receptionists.

PROFESSIONAL CAREERS INSTITUTE
6321 La Pas Trail, Indianapolis, IN 46268
Telephone: (317) 299-6001

Are You Moving?

If so, please send change of address to Membership Dept., ISMA, 3935 N. Meridian St., Indianapolis, IN 46208, at least six weeks before you move.

Name _____

Address _____

City _____ State _____ Zip _____

County _____

IMPORTANT — Attach mailing label from your last Journal here.

ADVERTISERS IN THIS ISSUE

November 1979 Vol. 72 No. 11

Americana Healthcare Center 819
Blue Cross-Blue Shield 803
Brown Pharmaceutical Co., Inc. 829
Burroughs Wellcome Company 832, 865
Campbell Laboratories, Inc. 856
Commercial Announcements 869
Eli Lilly and Company 815
Hanger Protheses 862
Immke Circle Leasing, Inc. 864
Indiana Medical Bureau 813
McClain Car Leasing, Inc. 863
Medical Protective Company 804
Mediclinics 853
Merck Sharp & Dohme 812
Merrell-National, Inc. ..820, 821, 858, 859, 860
Morris Plan 818
P&SLI 848
Physicians' Directory 866, 867
Porsche + Audi 851
Professional Careers Institute 870
Ranac Computer Corp. 805
Roche Laboratories Covers, 830, 831
Smith Kline Diagnostics 822
Smith Kline & French 857
Townsend, J. Russell & Associates 807
Upjohn Company 809, 810, 811, 812
U.S. Air Force 823

In accepting advertising for publication, THE JOURNAL has exercised reasonable precaution to insure that only reputable factual advertisements are included. However, we do not have facilities to make comprehensive or complete investigation, and the claims made by advertisers in behalf of goods, services and medicinal preparations, apparatus or physical appliances are to be regarded as those of the advertisers only. Neither sanction nor endorsement of such is warranted, stated or implied by the association.

VOLUME 72 Yr. 1979

Stubbed for No(s).
Number 12 (DEC.)

For Further Information,
please inquire of the
Reference Librarian

SUPPLEMENT

March 1979 • Vol. 72 • No. 3

The JOURNAL

OF THE INDIANA STATE MEDICAL ASSOCIATION

LIBRARY
U.C. SAN FRANCISCO
MAR 29 1979

County Medical Society Code Numbers

010	Adams
082	Allen
014	Bartholomew
018	Benton
062	Blackford (see Delaware-Blackford)
022	Boone
014	Brown (see Bartholomew-Brown)
026	Carroll
030	Cass
034	Clark
038	Clay
042	Clinton
114	Crawford (see Harrison-Crawford)
046	Daviess
050	Dearborn
054	Decatur
058	DeKalb
062	Delaware
066	Dubois
070	Elkhart
296	Evansville (see Vanderburgh)
074	Fayette
078	Floyd
082	Fort Wayne (see Allen)
086	Fountain
174	Gary (see Lake)
074	Franklin (see Fayette-Franklin)
090	Fulton
094	Gibson
098	Grant
102	Greene
106	Hamilton
110	Hancock
114	Harrison
118	Hendricks
122	Henry
126	Howard
130	Huntington
134	Indianapolis (see Marion)
138	Jackson
142	Jasper
146	Jay
150	Jefferson
140	Jennings
158	Johnson
162	Knox
166	Kosciusko
170	LaGrange
174	Lake
178	LaPorte
182	Lawrence
186	Madison
134	Marion
190	Marshall
046	Martin (see Daviess-Martin)
194	Miami
198	Montgomery
214	Monroe (see Owen-Monroe)
062	Muncie (see Delaware-Blackford)
202	Morgan
204	Newton
206	Noble
050	Ohio (see Dearborn-Ohio)
210	Orange
214	Owen
218	Parke
222	Perry
226	Pike
230	Porter
234	Posey
238	Pulaski
242	Putnam
246	Randolph
250	Ripley
254	Rush
258	St. Joseph
262	Scott
266	Shelby
258	South Bend (see St. Joseph)
270	Spencer
274	Starke
278	Steuben
282	Sullivan
150	Switzerland (see Jefferson-Switzerland)
298	Terre Haute (see Vigo)
286	Tippecanoe
290	Tipton
314	Union (see Wayne-Union)
296	Vanderburgh
218	Vermillion (see Parke-Vermillion)
298	Vigo
302	Wabash
086	Warren (see Fountain-Warren)
306	Warrick
310	Washington
314	Wayne
318	Wells
322	White
326	Whitley

1979 Membership Roster

INDIANA STATE MEDICAL ASSOCIATION

Following is an alphabetical list of members as of December 31, 1978.

The primary specialty appears after the physician's name and the number of the county where the physician is a member appears next. See facing page for explanation of county code numbers.

A list of members by counties begins on page 157/369.

For explanation of Specialty Codes see inside back cover.

If any errors are found, please report them to the Membership Department, ISMA, 3935 N. Meridian St., Indianapolis 46208. The cooperation of members is urgently requested.

ALPHABETICAL LIST OF MEMBERS

AARON,BARUCH MICHAEL EM 174
951 SHERWOOD LAKE DR APT 1-C
SCHERERVILLE IN 46375

ABELEDA,LAMBERTO VILLAS IM 266
RR 2 BOX 373
SHELBYVILLE IN 46176

ABELL,CHAS FREDERICK ORS 098
104 PROF ARTS CENTER
MARION IN 46952

ABELL,WM AUSTIN P 186
431 WEST NINTH ST
ANDERSON IN 46016

ABLE,WALTER FOP 014
3200 SYCAMORE DR
BLDG 2 B
COLUMBUS IN 47201

ABRAM,ROBT MICHAEL IM 214
121 SOUTH SECOND ST
ELLETTSVILLE IN 47429

ABRAMSON,ALLAN LAWRENCE GP 174
3290 GRANT ST
GARY IN 46408

ACHER,ROBT PAUL GP 054
221 E WASHINGTON ST
GREENSBURG IN 47240

ACKER,HERBERT KARL JOHN FP 082
3610 BROOKLYN
FORT WAYNE IN 46809

ACOSTA,AMADOR ALFONSO PTH 174
MERCY HOSPITAL
GARY IN 46402

ACOSTA,ARACELI TERNIDA AN 174
1600 WEST 4TH ST
HOBART IN 46342

ACOSTA,CONSTANCIO BELO PD 174
568 EAST 2ND ST
HOBART IN 46342

ACTON,CHAS MICHAEL D 298
221 SOUTH 66TH ST
TERRE HAUTE IN 47807

ADAD,WAHBI CD 174
8732 WOODWARD
HIGHLAND IN 46322

ADAMS,ELMER W PD 082
3124 E STATE BLVD
FORT WAYNE IN 46805

ADAMS,JULIA LINDSAY GP 062
4608 W JACKSON
MUNCIE IN 47306

ADAMS,PARKS MADDEN US 302
1104 NORTH WAYNE ST
NORTH MANCHESTER IN 46962

ADAMS,WM B AN 062
4608 W JACKSON ST
MUNCIE IN 47304

ADAMSON,WM ERNEST PTH 296
450 EAST MEADE DR
EVANSVILLE IN 47715

ADDIS,HOWARD MICHAEL GS 258
303 MAIN ST
MISHAWAKA IN 46544

ADDLEMAN,ROBT H AN 134
R R 2 BOX 146R
BROWNSBURG IN 46112

ADE,CHAS HAMILTON OTO 286
314 NORTH 6TH ST
LAFAYETTE IN 47901

ADE,MARY EDITH KELLER GP 286
314 NORTH 6TH ST
LAFAYETTE IN 47901

ADKINS,STANLEY RAY IM 014
380 PLAZA DRIVE SUITE D
COLUMBUS IN 47201

ADLARD,JOHN MARTIN — IM — I74
8008 GREENWOOD AVE
MUNSTER IN 46321

ADLER,ALAN JAY — GP — 126
806 S BERKLEY RD
KOKOMO IN 46901

ADLER,DAVID LEO — PTH — 014
4224 NORTH RIVERSIDE DRIVE
COLUMBUS IN 47201

ADLER,FRED — IM — I74
1031 FRANKLIN PARKWAY
MUNSTER IN 46321

ADNEY,FRANK BROWN — U — 314
1015 SOUTH A ST
RICHMOND IN 47374

ADORABLE,BENEDICTO C — AN — 150
P O BOX 447
MADISON IN 47250

ADYE,WALLACE MORGAN — GP — 296
1307 STRINGTOWN RD
EVANSVILLE IN 47711

AESCHLIMAN,DALE — US — 082
5717 SOUTH ANTHONY
FORT WAYNE IN 46806

AESCHLIMAN,WILLIAM JAMES — FP — 082
3217 LAKE AVE
FORT WAYNE IN 46805

AGANA,ADRIANO AGCAOILI — GP — I74
5000 W RIDGE RD
GARY IN 46408

AGRAWAL,AMARNATH B — IM — 178
WALTERS CLINIC
MICHIGAN CITY IN 46360

AHEARN,DANL JOS — NEP — 134
1633 N CAPITOL AVE # 722
INDIANAPOLIS IN 46202

AHLBRAND,ROLAND CARL — OS — 082
4820 CHAUCER
FORT WAYNE IN 46815

AHLER,KENNETH JAMES — FP — I42
1103 E GRACE ST
RENSSELAER IN 47978

AHMAD,WAHEED — GS — 078
1919 STATE ST NO 308
NEW ALBANY IN 47150

AHN,KYUNG JIN — GS — 174
800 MAC ARTHUR BLVD
MUNSTER IN 46321

AHUJA,GIRDHAR LAL — PD — 134
6928 YOSEMITE CT
INDIANAPOLIS IN 46217

AHUJA,SHASHI KANT — IM — 082
604 W WAYNE ST
FORT WAYNE IN 46802

AIGOTTI,RONALD ERNEST — HEM — 258
211 EDDY ST
SOUTH BEND IN 46617

AIKEN,ARTHUR FRANK — GP — 082
3010 E STATE ST
FORT WAYNE IN 46805

AIKEN,NEVIN E — GPM — 082
4321 GOSHEN RD
FORT WAYNE IN 46808

AKE,LOREN FRANCIS — GP — 314
220 SOUTH 18TH ST
RICHMOND IN 47374

AKIN,DANIEL P — OTO — 078
2580 CHARLESTOWN ROAD
NEW ALBANY IN 47150

AKIN,EMEL BILGE — US — 296
8125 PETERSBURG RD
EVANSVILLE IN 47711

AKIN,NEVZAT — GE — 296
8125 PETERSBURG ROAD
EVANSVILLE IN 47711

ALANA,FORTUNATO C — P — 102
P O BOX 351
BLOOMFIELD IN 47424

ALARCON,ARCADIO M — IM — 202
P O BOX 1351
MARTINSVILLE IN 46151

ALBERTSON,FRANK P — GP — 134
5318 NORTH BOSART AVE
INDIANAPOLIS IN 46220

ALBRECHT,WILLARD HAROLD — AN — 134
7400 HOLLINGSWORTH DR
INDIANAPOLIS IN 46268

ALBRIGHT,JAMES E — ORS — 082
5050 NORTH CLINTON
FORT WAYNE IN 46805

ALCORN,MERRITT O — PTH — 150
R D 2
MADISON IN 47250

ALDRED,ALLEN W — PTH — 082
3024 FAIRFIELD AVE
FORT WAYNE IN 46807

ALDRICH,DAVID DOUDT — PTH — 286
LAFAYETTE HOME HOSP
LAFAYETTE IN 47902

ALEXANDER,ALAN AMES — PD — 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

ALEXANDER,JACK LEE — PD — 062
NORWOOD OFFICE CTR
MUNCIE IN 47302

ALEXANDER,JEFFREY LYNN — PD — 134
6401 SPRINGMILL ROAD
INDIANAPOLIS IN 46260

ALEXANDER,JOHN EVAN OPH 296
2895 WASHINGTON AVE
EVANSVILLE IN 47714

ALEXANDER,STEPHEN J OPH 198
314 W WABASH AVE
CRAWFORDSVILLE IN 47933

ALEXANDRESCU,GHEORGHE DR 218
6 CRESTHILL ROAD
TERRE HAUTE IN 47802

ALFANO,PAUL ANGELO TS 174
1075 WARRICK
GARY IN 46403

ALI,SYED A IM 306
1156-B EAST MAIN
BOONVILLE IN 47601

ALIG,HOWARD MARION OPH 134
ST FRANCES MED ARTS BLDG
1500 ALBANY ST-SUITE # 909
BEECH GROVE IN 46107

ALIG,VINCENT BOONE P 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

ALL,BARBARA ANN BEDWELL AN 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

ALLEGRETTI,MICHAEL L A 174
8238 OAKWOOD ST
MUNSTER IN 46321

ALLEN,DONALD RAY IM 296
642 ADAMS
EVANSVILLE IN 47713

ALLEN,GEO S GP 078
BOX 158
GEORGETOWN IN 47122

ALLEN,LAWRENCE E U 186
2009 BROWN ST
ANDERSON IN 46016

ALLEN,ROBT KIRBY OM 134
2900 NORTH SHADELAND
INDIANAPOLIS IN 46219

ALLEN,ROBT T OPH 314
34 S 7TH ST
RICHMOND IN 47374

ALLEN,WM H NS 296
SUITE 500
801 ST MARY'S DR
EVANSVILLE IN 47715

ALLEY,TERRY L FP 258
316 N IRONWOOD DR
SOUTH BEND IN 46615

ALLEY,THOS WM NEP 134
2020 W 86TH ST STE 307
INDIANAPOLIS IN 46260

ALMASE,RODOLFO MEDENILLA GS 174
904 RIDGE ROAD
HOBART IN 46342

ALSIKAFI,FADHIL H GS 298
3050 POPLAR STREET
TERRE HAUTE IN 47803

ALSTOTT,DAVID FREDERICK PTH 286
P O BOX 1246
LAFAYETTE IN 47902

ALT,EDWARD MATTHEW FP 174
7550 HOHIMAN
MUNSTER IN 46321

ALTIER,WM HOWARD GP 018
1721 HEMLOCK RD
LAFAYETTE IN 47905

ALTUNA-RAMIREZ,RAQUEL AN 230
PORTER MEM HOSP
VALPARAISO IN 46383

ALUNING,PASTOR DAVID GS 090
819 E 9TH ST
ROCHESTER IN 46975

ALVAREZ,PAUL ORS 230
2501 CUMBERLAND DR
VALPARAISO IN 46383

ALVEY,CHAS ROBT FP 062
115 N CHERRY ST
MUNCIE IN 47305

ALVIS,DAVID LEE OPH 134
50 EAST 91ST ST
INDIANAPOLIS IN 46240

ALVIS,EDMOND OCHS OPH 134
474 W 92ND ST
INDIANAPOLIS IN 46260

AMBROSE,JESSE CLEMENTS GP 106
298 N 9TH ST
NOBLESVILLE IN 46060

AMBROZAITIS,KAZYS GEO R 174
8701 BROADWAY
MERRILLVILLE IN 46410

AMICO,PASQUALE JOS GP 174
6111 HARRISON ST
MERRILLVILLE IN 46410

AMIN,YOGESCHANDRA M IM 082
3030 LAKE AVE
FORT WAYNE IN 46805

AMINI,SOHRAB GS 066
BOX 239 MEDICAL ARTS PLAZA
HUNTINGBURG IN 47542

AMORINI,MICHAEL F AN 014
3183 SYCAMORE CT
SUITE B
COLUMBUS IN 47201

ANAS,PANDELI GS 298
221 S 6TH ST
TERRE HAUTE IN 47807

ANDERSON,ERNEST GP 082
1601 EAST PAULDING RD
FORT WAYNE IN 46816

ANDERSON,GARLAND D FP 082
5110 N CLINTON
FORT WAYNE IN 46825

ANDERSON,JAMES TWYFORD FP 110
120 W MC KENZIE
GREENFIELD IN 46140

ANDERSON,JOHN B GS 162
BOX 977
VINCENNES IN 47591

ANDERSON,JOHN T OS 134
3436 KENILWORTH
INDIANAPOLIS IN 46208

ANDERSON,MILTON H P 296
3700 BELLEMEADE
EVANSVILLE IN 47715

ANDERSON,STEPHEN LEE IM 258
919 EAST JEFFERSON BLVD
SOUTH BEND IN 46622

ANDERSON,WALTER C GS 298
2235 WABASH AVE
TERRE HAUTE IN 47807

ANDERSON,WM ROBBLEE ORG 214
421 W 1ST ST
BLOOMINGTON IN 47401

ANDERSON,WM STAFFORD FP 186
2101 JACKSON ST SUITE 114
ANDERSON IN 46014

ANDREW,JERALD LEE FP 082
5717 S ANTHONY
FORT WAYNE IN 46806

ANDREWS,FREDERICK BATMAN DR 014
P O BOX 1480
COLUMBUS IN 47201

ANDREWS,HUGH KENNETH GP 158
1035 W JEFFERSON ST
FRANKLIN IN 46131

ANG,DOMINGO LIM IM 314
3100 WOODGATE WAY
RICHMOND IN 47374

ANG,ROBERT T N 174
5500 E 81ST AVE
MERRILLVILLE IN 46410

ANG,ROSA UY TAN AN 314
3100 WOODGATE WAY
RICHMOND IN 47374

ANGEL,VIRGIL E GP 174
2933 JEWETT AVE
HIGHLAND IN 46322

ANGELES,ARMANDO E GS 074
1926 VIRGINIA AVE
CONNERSVILLE IN 47331

ANGELES,ULDARICO A AN 174
2849 WILLOW CREEK
PORTAGE IN 46368

ANGULO,EDILBERTO D PD 174
110 RIDGE RD
MUNSTER IN 46321

ANSHUTZ,WM M R 134
6340 BREAMORE RD
INDIANAPOLIS IN 46220

ANTALIK,THOS JOHN GS 062
420 WEST WASHINGTON ST
MUNCIE IN 47305

ANTES,EARL H IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

ANTREASIAN,BERJ IM 134
1303 N ARLINGTON AVE
INDIANAPOLIS IN 46202

APPEL,RICHARD HARDY EM 134
122 EAST 61ST ST
INDIANAPOLIS IN 46220

APPLE,EDDIE R GP 310
P O BOX 405
SALEM IN 47167

APPLEGATE,A EARL GP 042
1303 S JACKSON ST
FRANKFORT IN 46041

APPLEGATE,GEORGE WILLIAM NEP 134
2020 W 86TH ST-STE 307
INDIANAPOLIS IN 46260

ARATA,JAMES ANDREW R 082
2802 E STATE BLVD
FORT WAYNE IN 46805

ARATA,JUSTIN E GS 082
3124 E STATE
FORT WAYNE IN 46805

ARATA,LUCIAN ALPHONSUS GP 266
428 W HENDRICKS ST
SHELBYVILLE IN 46176

ARBEITER,HERBERT PD 174
7550 HOHMAN AVE
MUNSTER IN 46321

ARBOGAST,JOHN L GER 134
5139 SOUTH MC FARLAND
INDIANAPOLIS IN 46227

ARBUCKLE,RUSSELL LOWELL GP 134
1530 N ILLINOIS ST
INDIANAPOLIS IN 46202

ARCHANGEL,CESAR S P 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

ARDALAN,ABDOLAZIZ MOEZ GS 182
2900 W 16TH ST
BEDFORD IN 47421

ARENDELL,ROBT E GP 296
700 HELFRICH LANE
EVANSVILLE IN 47712

ARFORD,JOHN ELMORE EM 166
10526 MORNING MIST TRAIL
FORT WAYNE IN 46804

ARIVE,FLORO FERNANDO GP 110
11825 BROADWAY ST
OAKLANDON IN 46236

ARLOOK,THEODORE DAVID D 070
912 W FRANKLIN ST
ELKHART IN 46514

ARMALAVAGE,LEON J ORS 230
509 NEAPOLITAN WAY
NAPLES FL 33940

ARMBUSTER,THOMAS G R 082
2200 LAKE AVE
FORT WAYNE IN 46805

ARMER,ROBT M PD 134
3500 LAFAYETTE ROAD
INDIANAPOLIS IN 46222

ARMSTEAD,JOHN WM OBG 134
2140 N CAPITOL AVE
INDIANAPOLIS IN 46202

ARNEY,AMOS GP 178
1225 E COOLSPRING
MICHIGAN CITY IN 46360

ARNOLD,AARON LEON GP 134
6221 N KEYSTONE
INDIANAPOLIS IN 46220

ARNOLD,ANTHONY ORS 134
3590 TALLWOOD LANE
GREENWOOD IN 46142

ARNOLD,ROBERT DALE OBG 134
5470 E 16TH ST
INDIANAPOLIS IN 46218

ARON,TITU ORS 174
1802 COLUMBUS OR
EAST CHICAGO IN 46312

ARONOFF,MICHAEL STEPHEN GP 134
600 N JORDAN ST
BLOOMINGTON IN 47401

ARROWSMITH,JAMES LLOYD U 174
513 RIDGE RD
MUNSTER IN 46321

ARROYO,SYLVIA Z AN 296
P O BOX 245
NEWBURGH IN 47630

ARSHAD,MAHJABIN K P 174
7899 TAFT ST
MERRILLVILLE IN 46410

ARSHAD,MOHAMMAD P 174
THE MERRILLVILLE CLINIC PC
7899 TAFT AVE P O BOX 8419
MERRILLVILLE IN 46410

ARTIS,MYRLE EVERETT GP 126
519 1/2 N MAIN ST
KOKOMO IN 46901

ARUTA,EFREN V R 118
1000 EAST MAIN ST
HENDRICKS COUNTY HOSPITAL
DANVILLE IN 46122

ARVIN,DELANO ZEUS R 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

ASH,STEPHEN R NEP 286
2600 GREENBUSH ST
ARNETT CLINIC
LAFAYETTE IN 47904

ASHBURN,CLARENCE MILLER AN 062
2810 ETHEL AVE
MUNCIE IN 47304

ASHER,JAMES WILDING GP 134
8407 MOORE RD
INDIANAPOLIS IN 46278

ASHMAN,WM CARL PD 082
2828 FAIRFIELD
FORT WAYNE IN 46807

ASHTON,ROMNEY WM DR 070
29382 CHANNEL VIEW
ELKHART IN 46514

ASSUE,CLARE MELBA P 134
1315 W 10TH ST
INDIANAPOLIS IN 46207

ASUNCION,LEYTE B GP 306
BOONVILLE IN 47601

ATASSI,BASSEM U 174
6111 HARRISON
MERRILLVILLE IN 46410

ATHAR,SHAHID END 134
8402 HARCOURT ROAD NO 509
INDIANAPOLIS IN 46260

ATKINS,CLARENCE C OTO 254
RFD 6
GREENSBURG IN 47240

ATKINS,CLAYTON HUGH GP 134
100 N MADISON AVE
GREENWOOD IN 46142

ATKINS,STEVEN DALE GP 134
100 N MADISON AVE
GREENWOOD IN 46142

ATWOOD,WM HENRY IM 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

ATZ,WILLIAM A ORS 134
ST FRANCIS MED ARTS BLDG
BEECH GROVE IN 46107

AUBURN,RICHARD P — GS — I74
7905 CALUMET AVE
MUNSTER IN 46321

AUCKLEY,JAMES LEONARO — IM — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

AULL,EDWARD BERNARD — PO — I34
6214 BROADWAY
INDIANAPOLIS IN 46220

AULT,ROY J — OBG — 298
3050 POPLAR ST
TERRE HAUTE IN 47803

AUST,CHAS MERSHAL — GP — 082
3024 FAIRFIELD AVE
FORT WAYNE IN 46807

AUSTIN,CHAS E — GP — I86
1415 RAIBLE
ANDERSON IN 46011

AUSTIN,EUGENE WM — PD — 296
3700 WASHINGTON AVE
ST MARYS HOSPITAL
EVANSVILLE IN 47750

AUSTIN,RICHARD PAUL — GP — I82
1501 J STREET ROOM 302
BEDFORD IN 47421

AVERY,GEO O — GP — I34
5321 N KESSLER BLVD
INDIANAPOLIS IN 46208

AYERS,JOHNNIE — FP — I34
5602 MADISON AVE
INDIANAPOLIS IN 46227

AYERS,MARION EDWARD — AN — I06
7979 ENGLEWOOD RD
INDIANAPOLIS IN 46240

AYOUB,ADEL HABIB — PUD — I74
243 WESTGATE DR
VALPARAISO IN 46383

AYRES,WENDELL WILLARD — GS — 098
1807 N HAWTHORNE RD
MARION IN 46952

AZAR,GEO ALFRED — PTH — 230
814 LA PORTE AVE
VALPARAISO IN 46383

BAADJ,ABOEL GHANI — GS — I34
2809 S HOLT RD
INDIANAPOLIS IN 46241

BABB,FORREST J — GP — 286
1303 PALMER DRIVE APT 211
WEST LAFAYETTE IN 47906

BABCOCK,JAMES LOWELL — ORS — 318
TIMBERRIDGE ROAD
R R 5 BOX 197
BLUFFTON IN 46714

BABCOKE,GARY ALLEN — GP — 230
814 LA PORTE
VALPARAISO IN 46383

BACALA,JESUS C — GP — 262
69 WARDELL ST
SCOTTSBURG IN 47170

BACHMANN,ARNOLD J — OBG — 134
1615 OLES DRIVE
INDIANAPOLIS IN 46208

BACKER,GEO P — R — 178
806 MAPLE AVE
LA PORTE IN 46350

BACKER,HENRY GEO — GP — 066
FERDINAND IN 47532

BACKER,MARY B YEAGER — IM — I78
1533 MICHIGAN AVE
LA PORTE IN 46350

BACKS,ALTON J — DR — 258
720 E CEDAR STREET
SOUTH BEND IN 46617

BADAR,GREGORIO F — P — I74
3229 BROADWAY
GARY IN 46409

BADER,JOS — OS — I34
6457 BRAMFORD CT
INDIANAPOLIS IN 46256

BADER,PATRICIA I ENGLUM — PD — 318
303 S MAIN ST
BLUFFTON IN 46714

BAGHDASSARIAN,SAHAG ARAM — OPH — I74
8315 SCHREIBER DR
MUNSTER IN 46321

BAHLER,DEAN R — OM — I98
1009 SLOAN ST
CRAWFORDSVILLE IN 47933

BAHR,ROBT ERNEST — GP — 082
3217 LAKE
FORT WAYNE IN 46805

BAILEY,EARL W — GS — 030
511 HUNTERS DRIVE B
CARMEL IN 46032

BAILEY,LAWRENCE S — GP — 022
P O BOX 17
ZIONSVILLE IN 46077

BAILEY,PAUL PRESTON — U — 082
1840 PEMBERTON DR
FORT WAYNE IN 46805

BAILEY,THOS EDWIN — GS — 102
129 EAST VINCENNES ST
LINTON IN 47441

BAIRD,GLENN D — PUD — 296
DEACONESS HOSP
EVANSVILLE IN 47710

BAIRD,MALCOLM KEITH FP 198
215 WARD ST
CRAWFORDSVILLE IN 47933

BAIRD,MELVIN SCOTT GP 134
19 W 22ND ST
INDIANAPOLIS IN 46202

BAKER,ELDON ELLSWORTH FP 026
110 S UNION ST
DELPHI IN 46923

BAKER,GLENN WILBUR FP 118
BOX 36
BROWNSBURG IN 46112

BAKER,JOHN C OS 134
BOX 368
1 WEST 26TH ST
INDIANAPOLIS IN 46206

BAKER,JOHN R AN 286
2321 CARMEL DR
WEST LAFAYETTE IN 47906

BAKER,LESLIE MAYER GP 050
501 4TH ST
AURORA IN 47001

BAKER,PAUL D AN 318
303 S MAIN ST
BLUFFTON IN 46714

BAKER,RAYMOND C PD 296
3201 OAK HILL ROAD
EVANSVILLE IN 47711

BAKER,SAMMIE BRUCE R 296
460 MARTINS LANE
EVANSVILLE IN 47715

BALAMOHAN,RAMALINGAM CD 318
303 SOUTH MAIN ST
BLUFFTON IN 46714

BALCH,JAMES FERGUSON U 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

BALDWIN,JAMES R PTH 062
408 TAFT ROAD
MUNCIE IN 47304

BALINAO,REUBEN CASTILLO AN 178
1511 WABASH STREET
MICHIGAN CITY IN 46360

BALKEMA,CATHERINE M GP 286
30 N 21ST ST
LAFAYETTE IN 47904

BALL,CLAY ADRA GP 062
WEST MINSTER VILLAGE MUNCIE
MUNCIE IN 47302

BALL,G MICHAEL OBG 098
702 RIVER DRIVE
MARION IN 46952

BALL,J ROBT GS 082
3 RIVERS EAST - STE 108
FORT WAYNE IN 46802

BALL,JOS EMORY GP 134
6612 E 9TH ST
INDIANAPOLIS IN 46219

BALL,MARGARET J HITZEMAN HEM 082
13434 ABOITE CTR RD
FORT WAYNE IN 46804

BALL,W PHILIP IM 062
2600 W JACKSON ST
MUNCIE IN 47303

BALLANTINE,THOS VAN NESS GS 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

BALTER,EUGENE LEE R 174
1600 W 6TH AVE
GARY IN 46402

BALTES,JOS H GP 082
821 BROADWAY
FORT WAYNE IN 46802

BALTZER,DONALD JAN AN 062
2810 ETHEL AVE
MUNCIE IN 47304

BALUYOT,GREGORIO R OBG 054
232 NORTH BROADWAY
GREENSBURG IN 47240

BALUYUT,AMANDO L U 194
210 WEST BOULEVARD
PERU IN 46970

BANGUIS,ELISEO TAMOLA GS 266
103 W WASHINGTON ST
SHELBYVILLE IN 46176

BANGUIS,LUCIA PASILABBAN IM 266
103 W WASHINGTON ST
SHELBYVILLE IN 46176

BANKOFF,DAVID LAWRENCE ORS 258
328 NORTH MICHIGAN STREET
SOUTH BEND IN 46601

BANKOFF,MILTON LEWIS GP 178
1225 E COOLSPRING
MICHIGAN CITY IN 46360

BANNON,WM G IM 298
400 8TH AVE
TERRE HAUTE IN 47804

BAO,DANNY C D 134
11017 GREENBRIAR DR
CARMEL IN 46032

BARAN,CHAS NS 258
212 SHERLAND BLDG
SOUTH BEND IN 46601

BARBEE,JOHN YOUNG OPH 078
1919 STATE STREET
210 PROFESSIONAL ARTS BLDG
NEW ALBANY IN 47150

BARCH,JOHN W OM 082
1300 SOUTH CLINTON ST
FORT WAYNE IN 46802

BARD,FRANK BRUCE GP 138
305 E HOWARD ST
CROTHERSVILLE IN 47229

BARNARD,ROGER LESLIE FP 296
408 SOUTH ALVORD
EVANSVILLE IN 47714

BARNES,GILBERT HARVEY FP 134
513 SOUTH SHERMAN DR
INDIANAPOLIS IN 46203

BARNES,HELEN BEALL PD 158
RR 4
GREENWOOD IN 46142

BARNES,JAMES V IM 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

BARNHART,WILLARD T U 296
611 HARRIET ST STE 504
EVANSVILLE IN 47710

BARONE,CARMELO VICTOR GP 258
307 W 4TH ST
MISHAWAKA IN 46544

BARRETT,JAMES WM GS 046
300 NE 14TH
WASHINGTON IN 47501

BARRETT,THOS L PD 162
305 SOUTH 5TH ST
VINCENNES IN 47591

BARRON,ELMER ABRAHAM GP 174
3535 MICHIGAN AVE
EAST CHICAGO IN 46312

BARROS,PAUL R OPH 230
250 S WASHINGTON ST
HOBART IN 46342

BARTELL,GARY DENNIS P 202
19 W WASHINGTON ST
MARTINSVILLE IN 46151

BARTHELEMY,DOUGE HEM 174
2318 W 5TH AVE
GARY IN 46404

BARTHOLOME,CHARLES W D 062
2100 WEST MC GALLIARD
MUNCIE IN 47304

BARTLETT,DONALD TALMAGE OBG 162
307 S 5TH ST
VINCENNES IN 47591

BARTLEY,MAX DONALD OPH 134
50 E 91ST ST NO 210
INDIANAPOLIS IN 46240

BARTON,REGINALD RAYMOND GP 174
6101 MILLER AVE
GARY IN 46403

BARTON,ROBT FRANCIS GP 278
625 S SUPERIOR ST
ANGOLA IN 46703

BARTON,WILLOUGHBY M FP 314
316 E MAIN ST
CENTERVILLE IN 47330

BARTSCH,HARVEY LEONARD U 258
11118 KOLINA LANE
SUN CITY AZ 85351

BASAVARA,HIREMAT AN 062
2401 UNIVERSITY AVE
MUNCIE IN 47304

BASH,DAVID L GE 134
1303 NORTH ARLINGTON ST
INDIANAPOLIS IN 46219

BASH,STEPHEN ESTAL PD 082
2828 FAIRFIELD
FORT WAYNE IN 46807

BASH,WALLACE EUGENE PD 082
2828 FAIRFIELD
FORT WAYNE IN 46807

BASKETT,RUSSELL J GP 098
408 S MAIN ST
JONESBORO IN 46938

BASSETT,MARGARET ANN FP 022

THORNTOWN IN 46071

BASTNAGEL,WM FRANCIS IM 134
8305 CLARIDGE ROAD
INDIANAPOLIS IN 46260

BATACAN,GEO ACOSTA P 178
2208 FLAIRMOND TR L B
MICHIGAN CITY IN 46360

BATCHELDER,JOHN ERNEST CD 134
1500 ALBANY ST NO 101
BEECH GROVE IN 46107

BATE,MOSTAFA HASHEM GS 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

BATES,LAURENCE HOWARD IM 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

BATTERSBY,JAMES S TS 134
6001 SUNSET LANE
INDIANAPOLIS IN 46208

BATTIES,PAUL TERRY IM 134
4248 COLD SPRING RD
INDIANAPOLIS IN 46208

BATTLE,FREDERICK GERALD GP 178
3714 FRANKLIN
MICHIGAN CITY IN 46360

BAUER,THOS BRYANT PS 134
13825 N 107TH DR
SUN CITY AZ 85351

BAUGHN,WM LUTHER OM 186
1517 WINDING WAY
ANDERSON IN 46011

BAUM,JOHN RUSSELL GP 166
305 7TH ST
WINONA LAKE IN 46590

BAUMAN,RICHARD LEE R 082
700 BROADWAY
FORT WAYNE IN 46802

BAUMEISTER,HERBERT E AN 134
3266 N MERIDIAN ST
INDIANAPOLIS IN 46208

BAURLEY,JAMES R PD 202
19 WEST WASHINGTON ST
MARTINSVILLE IN 46151

BAUTISTA,AMANCIO G AN 296
5422 LAKESIDE DRIVE
NEWBURGH IN 47630

BAUTISTA,WARLITO AVILES IM 034
914 SPRINGDALE
JEFFERSONVILLE IN 47130

BAWAB,M SAMIR R 258
720 E CEDAR ST SUITE 010
SOUTH BEND IN 46617

BAXTER,HARRY R GP 138
209 SOUTH WALNUT ST
SEYMOUR IN 47274

BAXTER,NEAL E IM 214
306 E KIRKWOOD AVE
BLOOMINGTON IN 47401

BAXTER,SAML MAURICE OTO 078
1105 CENTRALIA CT
JEFFERSONVILLE IN 47130

BAYAZIT,LUTFI Y GP 082
535 W BERRY
FORT WAYNE IN 46802

BEACH,NORMAN F R 258
P O BOX 4016
SOUTH BEND IN 46635

BEACH,ROBT RUSSEL OS 134
5810 PLEASANT RUN PKWY
INDIANAPOLIS IN 46219

BEAHM,RONALD J PD 166
2217 E DUBOIS DRIVE
WARSAW IN 46580

BEAMS,RALPH H CURIE OPH 082
731 MED CENTER
FORT WAYNE IN 46802

BEAMS,RONALD NED OPH 134
12023 EDEN GLENN DRIVE
CARMEL IN 46032

BEAN,JOS STRATTON R 030
TWO CHASE PARK
LOGANSPORT IN 46947

BEAN,WM JOS D 098
1251 KEM RD
MARION IN 46952

BEARDSLEY,FRANK A GP 042
1201 OAK ST
FRANKFORT IN 46041

BEATTY,BRUCE EUGENE US 134
8962 CRAWFORDSVILLE RD
INDIANAPOLIS IN 46234

BEAVEN,JOHN B ABS 066
721 W 13TH ST-STE 102-103
JASPER IN 47546

BEAVER,ERNEST RAYMOND FP 142
111 THOMPSON ST
RENSSELAER IN 47978

BEAVER,HOWARD WILSON GP 134
3101 S MERIDIAN ST
INDIANAPOLIS IN 46217

BEAVER,NORMAN EUGENE FP 286
920 ELM DRIVE
WEST LAFAYETTE IN 47906

BEAVER,WALTER PHIL FP 134
495 WESTFIELD ROAD
NOBLESVILLE IN 46060

BECHTOL,LAVON DEE PA 134
506 WEXFORD CT
NOBLESVILLE IN 46606

BECHTOLD,DAVID LEE GS 258
720 E CEDAR
SUITE 380
SOUTH BEND IN 46617

BECHTOLD,SAML E OBG 258
17545 JUDAY LAKE DR
SOUTH BEND IN 46635

BECK,DAVID C D 286
402 NORTHWESTERN SUITE 106
WEST LAFAYETTE IN 47906

BECK,EVART MALCOLM IM 134
915 E 38TH ST
INDIANAPOLIS IN 46205

BECK,JAMES PHILLIP IM 046
1312 BEDFORD ROAD
WASHINGTON IN 47501

BECK,ROBT E R 296
611 HARRIETT STE 103
EVANSVILLE IN 47710

BECK,THOS ALFRED GP 098
BOX 218
SWAYZEE IN 46986

BECKER,HARRY GREGORY GS 134
6060 N COLLEGE AVE
INDIANAPOLIS IN 46220

BECKER,JERRY DONNELL IM 296
515 READ ST
EVANSVILLE IN 47710

BECKER,LOWELL ERVIN CHP 082
119 WEST RUDISELL BLVD
FORT WAYNE IN 46807

BECKER,SAML WM
2075 INDIANAPOLIS BLVD
WHITING IN 46394
D 174

BECKMAN,ARTHUR JOS
12110 GRANT ST
CROWN POINT IN 46307
GP 174

BECONOVICH,ROBT
7905 CALUMET AVE
MUNSTER IN 46321
GP 174

BEDWELL,MARION HADDON
16 N COURT ST
SULLIVAN IN 47882
GP 282

BEELER,FRANKLIN K
1931 BROWN ST
ANDERSON IN 46014
FP 186

BEELER,JOHN WATSON
7974 N ILLINOIS ST
INDIANAPOLIS IN 46260
R 134

BEERING,STEVEN CLAUS
IU MEDICAL CTR
INDIANAPOLIS IN 46223
IM 134

BEESLEY,RICHARD ROY
2600 GREENBUSH ST
LAFAYETTE IN 47904
PD 286

BEESLEY,ROBERT C
60 WEST MORGAN ST
MARTINSVILLE IN 46151
IM 202

BEESON,WILBUR P
1306 SHERWOOD DRIVE
GREENFIELD IN 46140
FP 110

BEESON,WILLIAM H
13 FARR HILLS DR
WESTFIELD IN 46074
GS 134

BEGGS,LOWELL FREDERICK
832 WASHINGTON ST
COLUMBUS IN 47201
GS 014

BEGLEY,JOS W
SUITE 303
801 S MARY'S DR
EVANSVILLE IN 47715
OTO 296

BEGLEY,ROBERT WILLIAM
1912 S JACKSON
ANDERSON IN 46014
US 186

BEHN,WALTER MARTIN
1900 68TH ST N 302
ST PETERSBURG FL 33710
GP 174

BEHREND,FRANK LUDWIG
1101 GLENDALE BLVD
VALPARAISO IN 46383
OBG 230

BEIERLEIN,KARL M
2716 BUTLER ROAD
FORT WAYNE IN 46808
OBG 082

BEIGHTS,RAYMOND SAML
2200 RANDALIA DR
FORT WAYNE IN 46805
GP 082

BEISEL,LARRY HOMAN
421 CHESTNUT ST
EVANSVILLE IN 47713
PD 296

BEISER,GEO DAVID
4321 FIR ST
EAST CHICAGO IN 46312
CO 174

BEJEC,LOUIS C
2005 VALPARAISO ST
VALPARAISO IN 46383
OPH 230

BELANGER,ROBT ALLEN
5029 BLUM DR
FORT WAYNE IN 46815
FP 082

BELCHER,ALAN DEVON
MARION GEN HOSP
MARION IN 46952
R 098

BELL,HORACE D
420 N HILL ST
SOUTH BEND IN 46617
GP 258

BELLIS,STEPHEN LAWRENCE
714 SOUTH ROGERS
BLOOMINGTON IN 47401
R 214

BELSHAW,GEO HENRY
1640 N RITTER AVE
INDIANAPOLIS IN 46218
OBG 134

BELSHAW,JAMES W
1301 SOUTH HARRISON
FORT WAYNE IN 46802
GP 082

BELT,JAMES H
8801 N MERIDIAN
INDIANAPOLIS IN 46260
PD 134

BELTZ,HOMER F
2001 W 86TH STREET
INDIANAPOLIS IN 46260
US 134

BEMAN,JOHN W
421 CHESTNUT ST
EVANSVILLE IN 47713
OTO 296

BENCHIK,FRANK AUGUST
4712 MAGOUN AVE
EAST CHICAGO IN 46312
FP 174

BENDER,BRUCE HAROLD
4949 CARSON AVE
INDIANAPOLIS IN 46227
IM 134

BENDER,MARTIN JOHN
3700 BELLMEADE
EVANSVILLE IN 47715
U 296

BENDLER,CARL HENRY
198 COUNTRY CLUB RD BOX 758
LAKE MARY FL 32746
GP 174

BENEDICT,HAROLD GAYMAN
1916 JACKSON ST
ANDERSON IN 46014
GP 186

BENEDICT,PAUL FRANCIS
5626 E 16TH
INDIANAPOLIS IN 46218
GS 134

BENHAM,LAWRENCE E GP 182
25TH AND Q ST DUNN MEM DOC P
BEDFORD IN 47421

BENJAMIN,SAMSON ADAM OBG 198
7 TWIN OAKS RR 8
CRAWFORDSVILLE IN 47933

BENKEN,LAWRENCE D OBG 062
1111 W JACKSON ST
MUNCIE IN 47305

BENNETT,ABNER P PTH 296
WELBORN BAPTIST HOSP
EVANSVILLE IN 47713

BENNETT,BENJ DOUGLAS GP 126
402 SOUTH BERKLEY RD
KOKOMO IN 46901

BENNETT,DICK L AN 046
LOOGOOTEE CLINIC EAST IST
LOOGOOTEE IN 47553

BENNETT,IVAN FRANK P 134
8452 GREEN BRAES DR N
INDIANAPOLIS IN 46234

BENNETT,JAMES E PS 134
INDIANA UNIV MED CTR
INDIANAPOLIS IN 46202

BENNETT,JENE R PTH 258
531 N MAIN ST
SOUTH BEND IN 46601

BENNETT,RONALD G ORS 014
411 PLAZA DRIVE SUITE H
TIPTON PARK PLAZA
COLUMBUS IN 47201

BENNETT,WM SHERMAN AN 134
1815 N CAPITAL AVE
INDIANAPOLIS IN 46202

BENSON,JAMES EDMUND P 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

BENSON,JESSE THOS OBG 134
650 N GIRLS SCH RD
INDIANAPOLIS IN 46224

BENTZ,EDWARD WAYNE AN 134
8402 HARCOURT ROAD
INDIANAPOLIS IN 46260

BENTZ,JOHN MARVIN OBG 318
418 WILLOWBROOK
BLUFFTON IN 46714

BENZ,JAMES ALBERT FOP 134
1001 W 10TH ST
INDIANAPOLIS IN 46202

BERGAL,MILTON B GP 174
2318 W 5TH AVE
GARY IN 46404

BERGAN,JOS ANTHONY GS 178
217 W HOMER ST
MICHIGAN CITY IN 46360

BERGHOFF,JAMES RAYMOND OM 082
3702 RUPP DR
FORT WAYNE IN 46815

BERGWALL,WARREN L FP 062
3111 WEST JACKSON
MUNCIE IN 47304

BERKE,ROBT D A 258
1118 LINCOLN WAY E
SOUTH BEND IN 46618

BERKER,BEDII S AN 062
P O BOX 2464
MUNCIE IN 47302

BERKSHIRE,SHAFFER B R 014
2400 EAST 17TH STREET
COLUMBUS IN 47201

BERKSON,MYRON E P 178
1101 E COOLSPRING AVE
MICHIGAN CITY IN 46360

BERMAN,EDWARD J PDS 134
3426 N MERIDIAN ST
INDIANAPOLIS IN 46207

BERNARD,MARVIN R NS 174
5500 EAST 81ST AVE
MERRILLVILLE IN 46410

BERNER,HERBERT WM OBG 062
2501 W JACKSON
MUNCIE IN 47303

BERNSTEIN,LAWRENCE D IM 174
7905 CALUMET
MUNSTER IN 46321

BERRY,GEORGE F FP 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

BERRY,MARGARET IM 134
5240 GREENWILLOW ROAD
INDIANAPOLIS IN 46226

BERUBEN,MIGUEL F IM 174
P O BOX 3159
EAST CHICAGO IN 46312

BETRAS,STEVEN A PTH 062
2602-A WEST GILBERT
MUNCIE IN 47303

BEUERMAN,VIRGIL ADOLPH OPH 286
2600 GREENBUSH ST
LAFAYETTE IN 47905

BEUTLER,THEODORE V U 082
527 W BERRY ST
FORT WAYNE IN 46802

BEVERS,MARK MITCHELL FP 138
209 SOUTH WALNUT ST
SEYMOUR IN 47274

BHAGWANDIN,HARRY OMROA — GP — 134
4761 SOUTHEASTERN AVE
INDIANAPOLIS IN 46203

BHANGOO,SUKMINDER SINGH — AN — 314
3320 DOROTHY LANE
RICHMOND IN 47374

BHATT,KISHOR R — PD — 306
1116 MILLIS AVE
WARRICK HOSPITAL INC
BOONVILLE IN 47601

BHATT,PALLAVI K — AN — 306
700 NORTH VINE ST
BOONVILLE IN 47601

BIBLER,LESTER DAVID — FP — 134
4360 N PENN
INDIANAPOLIS IN 46205

BICALHO,JOSE FERNAL — ORS — 174
6111 HARRISON ST
MERRILLVILLE IN 46410

BICKERS,EVERETT EARL — GP — 078
R R 3 BOX 572
FLOYDS KNOBS IN 47119

BIDNEY,EVELYN BRESLIN — GP — 214
5946 NORTH NEW JERSEY ST
INDIANAPOLIS IN 46220

BIEGEL,ANGENIETA ANNE — IM — 134
2842 STILLMAN AVE
INDIANAPOLIS IN 46268

BIERMAN,GILBERT HENRY — ORS — 082
3000 SOUTH WAYNE BLVD
FORT WAYNE IN 46807

BIGLAN,ALBERT W — OPH — 134
7 SYLVAN RD
PITTSBURGH PA 15221

BIGLER,FREDERICK W — AN — 070
124 PARMLEY
GOSHEN IN 46526

BIHL,JOHN HELMUT — OM — 010
3785 INDIAN TRAIL
ORCHARD LAKE MI 48033

BILL,ROBT O — PYA — 134
3231 N MERIDIAN ST
INDIANAPOLIS IN 46208

BILLENA,RAYMUNDO L — GP — 174
5490 BROADWAY PLAZA SUITE 101
MERRILLVILLE IN 46410

BILLINGS,ELMER RAY — IM — 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

BILLINGSLEY,JOHN SMITH — R — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

BILLS,ROBT J — GS — 174
504 BROADWAY
GARY IN 46402

BILLS,ROBT NOEL — GS — 174
504 BROADWAY
GARY IN 46402

BILODEAU,RICHARD GERARD — DR — 106
RR NO 6 BOX 400
NOBLESVILLE IN 46060

BINGLE,GLENN JAY — IM — 134
1500 N RITTER AVE
INDIANAPOLIS IN 46219

BINTASAN,SUNIDA — P — 214
640 S ROGERS ST
BLOOMINGTON IN 47401

BIRDZELL,JOHN PERRING — EM — 174
750 ELIZABETH DR
CROWN POINT IN 46307

BISHOP,MICHAEL DARYL — EM — 214
5960 W STATE ROAD 46
HOMESTEAD FARM
BLOOMINGTON IN 47401

BISHOP,ROBERT H — 134
1633 N CAPITOL AVENUE
INDIANAPOLIS IN 46202

BISSONNETTE,ROGER P — IM — 296
420 CHERRY ST
EVANSVILLE IN 47713

BIXLER,DONALD PAUL — OPH — 186
P O BOX 1835
ANDERSON IN 46014

BIXLER,GLORIA A GREENEN — P — 134
8402 HARCOURT RD-STE 317
INDIANAPOLIS IN 46260

BIXLER,JAMES AMOS — OPH — 082
MED-DENTAL BLDG-3030 LAKE AVE
FORT WAYNE IN 46805

BIZAL,JOHN ADOLPH — OTO — 296
350 W COLUMBIA SUITE 310
EVANSVILLE IN 47710

BIZER,MIER A — GP — 034
1206 SPRING ST
JEFFERSONVILLE IN 47130

BLACK,BOYD K — PTH — 162
GOOD SAMARITAN HOSP
VINCENNES IN 47591

BLACK,HENRY RAY — OS — 134
7851 HOLLY CREEK LANE
INDIANAPOLIS IN 46240

BLACK,JOS MORTON — GP — 138
502 WEST 2ND STREET
SEYMOUR IN 47274

BLACK,KENNETH A — FP — 230
2674P PORTAGE MALL
PORTAGE IN 46368

BLACK,M JAMES GP 118
BOX 36
BROWNSBURG IN 46112

BLACK,THOS HOUSTON FP 242
600 NORTH ARLINGTON
GREENCASTLE IN 46135

BLACKBURN,HOWARD R R 106
14010 ALLISONVILLE RD
NOBLESVILLE IN 46060

BLACKBURN,ROBT ALFRED OTO 134
3530 SOUTH KEYSTONE NO 310
INDIANAPOLIS IN 46227

BLACKFORD,FLORENCE SMITH R 134
5909 E 10TH ST
INDIANAPOLIS IN 46219

BLACKFORD,RALPH ELLIS GP 134
5909 E 10TH ST
INDIANAPOLIS IN 46219

BLACKWELL,DONALD S ORS 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

BLAIR,RICHARD GEO GP 130
3 PARKMOOR DRIVE
HUNTINGTON IN 46750

BLAIR,WILLIAM EDWARD ORS 178
300 WILE STREET #1
LA PORTE IN 46350

BLAISDELL,WM FREDERICK GP 138
1124 MEDICAL PL
SEYMOUR IN 47274

BLAKE,ALBERT L IM 134
5508 EAST 16TH ST
INDIANAPOLIS IN 46218

BLANCO,RAMON M NS 174
2167 GETTLER ST
DYER IN 46311

BLANDING,JAMES D PTH 286
2500 FERRY ST
LAFAYETTE IN 47904

BLANDO,ULDARICO BRINGAS R 230
802 LAPORTE AVE
VALPARAISO IN 46383

BLASSARAS,CRIST A GP 186
2005 BROADWAY
ANDERSON IN 46013

BLATT,ADOLPH EBNER IM 134
3266 N MERIDIAN ST APT 306
INDIANAPOLIS IN 46208

BLAZEY,ARTHUR GAIUS GP 046
CHRISTMAS VILLAGE
P O BOX 418
SANTA CLAUS IN 47579

BLEDSOE,JAMES GLEN GP 122
10073 GULF SHORE DR
NAPLES FL 33940

BLESSINGER,LOUIS HENRY GP 114
101 W CHESTNUT ST
CORYDON IN 47112

BLEZA,MAXIMO TULABOT OM 174
7905 CALUMET AVE
MUNSTER IN 46321

BLICHERT,PETER A OBG 082
THREE RIVERS E STE 104
FORT WAYNE IN 46802

BLIX,FRED MAYOR FP 134
8402 HARCOURT ROAD SUITE 513
INDIANAPOLIS IN 46260

BLOCH,RICHARD NEP 286
809 LAZY LANE
LAFAYETTE IN 47902

BLOEMKER,EDWARD F GP 134
6145 BRYAN DR
INDIANAPOLIS IN 46227

BLOOM,A WARD PH 098
610 RIVER DR
MARION IN 46952

BLOOM,GEO ROBT FP 070
236 SIMPSON
ELKHART IN 46514

BLOOMER,RICHARD SAML GP 218
115 N MARKET ST
ROCKVILLE IN 47872

BLOSS,BRYANT ALLEN ORS 296
801 ST MARYS DR
EVANSVILLE IN 47715

BLOSSOM,PAUL WRIGHT GP 314
825 SOUTH A ST
RICHMOND IN 47374

BLOXDORF,JOHN WM PTH 298
BOX 1468
TERRE HAUTE IN 47808

BLUE,EARL ROBT R 126
HOWARD COMM HOSP
KOKOMO IN 46901

BLUM,LEON LEIB PTH 298
P O BOX 1468
TERRE HAUTE IN 47808

BLUMENTHAL,ELLIOT JAY FP 258
225 LINCOLN WAY EAST
MISHAWAKA IN 46544

BLUTH,STEVEN ALAN OPH 258
710 J M S BLDG
SOUTH BEND IN 46601

BLYTHE,JERRY EDWARD GP 134
924-A PARK CENTRAL DR S
INDIANAPOLIS IN 46260

BOAZ,WM DALE GP 302
1025 MANCHESTER AVE
WABASH IN 46992

BDBB,KENNETH E — FP — I38
410 S CHESTNUT ST
SEYMOUR IN 47274

BDBERG,ARTHUR RICHARD — IM — 062
420 W WASHINGTDN ST
MUNCIE IN 47305

BDDNAR,LESLIE M — DRS — 258
328 N MICHIGAN ST
SDUTH BEND IN 46601

BOEN,BRADLEY NELSON — P — I34
5938 BRENDONRIDGE COURT SOUTH
INDIANAPDLIS IN 46226

BOESTER,JEFFREY ALLYN — DBG — I34
6130 REDCOACH COURT
INDIANAPOLIS IN 46250

BDGGS,EUGENE FULTDN — IM — 134
8 E TRDY AVE
INDIANAPDLIS IN 46225

BOHA,MARIA AGNES SZITTYA — GP — 078
SUITE 104
1919 STATE STREET
NEW ALBANY IN 47150

BOHA,RUDDLF LASZLO — GP — 078
1919 STATE ST
NEW ALBANY IN 47150

BOHLING,JEFFREY LUKE — DBG — 296
7101 MONRDE AVE
EVANSVILLE IN 47715

BDJRAB,LOUIS DEAN — AN — 134
3663 WALDEN PL
CARMEL IN 46032

BOLANDER,JAMES EDWIN — GP — 082
3217 E LAKE AVE
FORT WAYNE IN 46805

BDLIN,RDBT CORNWALL — IM — 286
2600 GREENBUSH
LAFAYETTE IN 47902

BOLING,FREDERICK FRANCIS — GP — 134
3049 S HOLT RDAD
INDIANAPDLIS IN 46241

BOLING,GRDVER C — GP — 134
1440 EAST 46TH ST
INDIANAPDLIS IN 46205

BOLING,RICHARD CLAYTON — OPH — 070
1332 W INDIANA AVE
ELKHART IN 46514

BOLINGER,GARRY LEE — CLP — 134
301 E 38TH ST
INDIANAPDLIS IN 46205

BOLLHEIMER,DON ALLEN — OPH — 082
623 MED CTR BLDG
FDRT WAYNE IN 46802

BDMALASKI,MARTIN DDNALD — DR — 066
1005 KUEBLER PL
JASPER IN 47546

BOMBA,BRAD JOS — GP — 214
515 WDODCREST DR
BLOOMINGTDN IN 47401

BDMBAR,LESLIE EUGENE — GP — 174
7905 CALUMET AVE
MUNSTER IN 46321

BONAVENTURA,ANGELO P — GP — 174
2914 HIGHWAY ST
HIGHLAND IN 46322

BDNAVENTURA,LED MARK — DRS — 134
1100 WEST MICHIGAN STREET
INDIANAPDLIS IN 46202

BOND,LARRY GENE — D — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

BOND,VIRGINIA KING — AN — 134
4525 W 59TH ST
INDIANAPOLIS IN 46254

BOND,WM HDLMES — IM — 134
I U MEDICAL CTR
INDIANAPOLIS IN 46202

BONJEAN,ALFRED L — DRS — I74
8695 CONN SUITE F
MERRILLVILLE IN 46410

BDNSETT,CHAS A — N — 134
6133 E 54TH PL
INDIANAPDLIS IN 46226

BODHER,OLGA M BONKE — PD — 134
2801 BARBERRY LANE APT F
INDIANAPDLIS IN 46205

BOONE,CLARENCE WAYNE — OBG — I74
2200 GRANT ST
GARY IN 46404

BOONE,RDBT D — TS — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

BOONJARERN,SAMPANTA — IM — 174
P O BDX 66
LDWELL IN 46356

BDOTH,BOYNTON HOOKER — D — 134
8801 N MERIDIAN ST SUITE 209
INDIANAPDLIS IN 46260

BDOTH,FRANKLIN M — PS — 258
3610 NORTHSIDE BLVD
SDUTH BEND IN 46615

BOOZE,JAMES H — ORS — 214
711 W 2ND ST
BLDDMINGTON IN 47401

BOPP,HENRY WM — GS — 298
221 S 6TH ST
TERRE HAUTE IN 47807

BOPP,JAMES — AN — 298
UNIDN HOSP
TERRE HAUTE IN 47808

BORDADOR,TEODORO E F — P — 034
104 MEDICAL ARTS BLDG
207 SPARKS AVE
JEFFERSONVILLE IN 47130

BORDER,JOHN FRANKLIN — CD — 062
3729 W JACKSON
MUNCIE IN 47304

BOREN,PAUL RANDOLPH — US — 234
POSEYVILLE IN 47633

BORGES,VICTOR V J — GS — 066
SUNSET DR
HUNTINGBURG IN 47542

BORHAN,ZIA — OBG — 182
2424 Q ST
BEDFORD IN 47421

BORLAND,RAYMOND MILTON — PH — 214
3210 E MOORES PK
BLOOMINGTON IN 47401

BORNSTEIN,HERSCHEL — GP — 174
3233 BROADWAY
GARY IN 46409

BORROMEO,VENUSTIANO H J — EM — 174
149 NEW ORLEANS ST
SCHERERVILLE IN 46375

BOSCH,RALPH OTTO — IM — 138
1125 MEDICAL PLACE
SEYMOUR IN 47274

BOSLEY,ROGER EUGENE — OBG — 286
2400 FERRY ST
LAFAYETTE IN 47904

BOSSARD,JOHN W — NS — 318
317 EAST CHERRY ST
BLUFFTON IN 46714

BOTKIN,CHAS THOS — GP — 062
BALL STATE UNIVERSITY
AMELIA T WOOD HEALTH SERVICE
MUNCIE IN 47306

BOTKIN,CLYDE GARRETT — GP — 062
520 WEST MAIN ST
MUNCIE IN 47305

BOTKIN,JAMES EDWARD — FP — 098
706 RIVER DR
MARION IN 46952

BOUGHER,GERALD RAY — GP — 286
JEFFERSON SQUARE
LAFAYETTE IN 47905

BOURKE,WM W — P — 098
1211 EUCLID AVE
MARION IN 46952

BOURLAND,BARBARA JOHNSON — PD — 286
606 WILSHIRE
WEST LAFAYETTE IN 47906

BOWDOIN,GEO EDWARD — GP — 070
2580 ESTERO BLVD NO 21
FORT MYERS BEACH FL 33931

BOWEN,GERALD THOS — FP — 050
605 WILSON CREEK ROAD
LAWRENCEBURG IN 47025

BOWEN,OTIS RAY — GP — 190
4750 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

BOWER,RICHARD ELRIE — GP — 082
3610 BROOKLYN AVE
FORT WAYNE IN 46809

BOWERS,CHAS RICHARD — GS — 186
2009 BROWN ST
ANDERSON IN 46014

BOWERS,COPELAND C — GP — 126
18145 FOREST VIEW RD
MONUMENT CO 80132

BOWERS,GEO W — U — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

BOWERS,JESSE W — GS — 082
1830 FOREST PARK BLVD
FORT WAYNE IN 46805

BOWERS,JOHN ALDEN — OPH — 126
18420 LAUREL DRIVE
SUN CITY AZ 85373

BOWERS,LYNN A — PD — 122
1229 SOUTH MAIN ST
NEW CASTLE IN 47362

BOWERSOX,LE ROY WM — PTH — 070
19519 COUNTY RD N 146
NEW PARIS IN 46553

BOWMAN,CHAS M — GS — 206
107 E JEFFERSON ST
ALBION IN 46701

BOWMAN,JOHN ALDEN — P — 126
HOWARD COMMUNITY HOSP
KOKOMO IN 46901

BOWMAN,LEON WILSON — GP — 078
104 PROFESSIONAL ARTS BLDG
NEW ALBANY IN 47150

BOWSER,PHILIP GORTNER — GP — 070
107 S 5TH ST
GOSHEN IN 46526

BOYCE,PAUL ACHILLES — DIA — 134
1010 EAST 86TH STREET
INDIANAPOLIS IN 46240

BOYD,CARL RITTER — R — 030
TWO CHASE PARK
LOGANSPORT IN 46947

BOYD,HARVEY CLARK — GYN — 298
221 S 6TH ST
TERRE HAUTE IN 47807

BOYER,DON W — GS — 022
1604 N LEBANON ST
LEBANON IN 46052

BOYER,FLOYD ALFRED — GP — 134
136 S WITTFIELD
INDIANAPOLIS IN 46229

BOYER,GRACE BESHGETOOR — OBG — 098
607 LOCUST ST
MARION IN 46952

BOYLE,CARROLL L — GP — 296
715 IST AVE-STE 41
EVANSVILLE IN 47710

BOYS,FAY FRANK — GP — 174
250-7TH AVE SOUTH
NAPLES FL 33940

BOZE,ROBT L — GP — 010
265 W WATER ST
BERNE IN 46711

BRADENBERGER,E JON — FP — 082
3217 LAKE AVE
FORT WAYNE IN 46805

BRADFIELD,ROBT STEVEN — OBG — 162
218 SECURITY BANK BLDG
VINCENNES IN 47591

BRADLEY,LOUIS FRANCIS — IM — 318
303 S MAIN
BLUFFTON IN 46714

BRADLEY,RICHARD VINCENT — GP — 126
R R NO 2 BOX 281
GREENTOWN IN 46936

BRADY,KINGDON — PTH — 286
612 TERRY LANE
LAFAYETTE IN 47906

BRADY,THOMAS A — ORS — 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

BRAKEL,FRANK J — IM — 296
420 CHERRY ST
EVANSVILLE IN 47713

BRANAM,GEO EVERETT — PTH — 062
1138 WARWICK RD
MUNCIE IN 47304

BRANCO,ARTHUR MATTHEW — GS — 174
7905 CALUMET AVE
MUNSTER IN 46321

BRANDES,DAVID CHAS — U — 098
123 RIVER DR
MARION IN 46952

BRANDEWIE,PILAR R NACU — P — 258
2604 MARINE
SOUTH BEND IN 46614

BRANDMAN,HARRY — P — 174
251 WEST SOUTH ST JO 13
GALESBURG IL 61401

BRANDT,WM E — GS — 082
618 W BERRY ST
FORT WAYNE IN 46802

BRANTLY,JAMES MONROE — IM — 134
11175 SOUTHEASTERN AVE
INDIANAPOLIS IN 46259

BRASHEAR,RICHARD — PUD — 134
7070 WASHINGTON BLVD
INDIANAPOLIS IN 46220

BRASOVAN,SRBISLAV N — OBG — 174
8585 BROADWAY SUITE 670
MERRILLVILLE IN 46410

BRAUER,ABRAHAM A — P — 174
1010 REYOME OR
GRIFFITH IN 46319

BRAUN,MARK W — 214
4232 PENN COURT
BLOOMINGTON IN 47401

BRAUN,STEPHEN EARL — OS — 296
2301 W MICHIGAN ST
EVANSVILLE IN 47712

BRAUNLIN,ROBT JUSTICE — OTO — 082
5110 N CLINTON
FORT WAYNE IN 46825

BRAVERMAN,GERALD LEE — IM — 134
4949 CARSON AVENUE
INDIANAPOLIS IN 46227

BRAYTON,LEE — GP — 134
3930 N ILLINOIS ST
INDIANAPOLIS IN 46208

BRECHTL,HARVEY J — GP — 258
119 S EDDY ST
SOUTH BEND IN 46617

BREITENFIELD,RICHARD V — NEP — 062
420 WEST WASHINGTON
MUNCIE IN 47305

BREITWEISER,THOS DAVID — R — 150
122 FAIRMONT DR
MADISON IN 47250

BREMER,WINDHAM — R — 178
916 WASHINGTON ST
MICHIGAN CITY IN 46360

BRENNAN,BETSY BECKER — D — 174
2833 LINCOLN STREET
HIGHLAND IN 46322

BRENNAN,THOS FRANCIS — OTO — 286
ARNETT CLINIC 2600 GREENBUSH
LAFAYETTE IN 47904

BRENNAN,WM CLARENCE — GS — 174
2833 LINCOLN ST
HIGHLAND IN 46322

BRENNER,HOWARD B — OBG — 174
800 MAC ARTHUR BLVD
MUNSTER IN 46321

BRENNER,HUGO ANTONIO — GS — 086
101 SUZIE LANE
ATTICA IN 47918

BREWER,DAVID HAROLD PD 014
5440 25TH ST RT 12 BOX 1-B
COLUMBUS IN 47201

BREWER,ROBT ALLEN OS 030
216 9TH ST
LOGANSPORT IN 46947

BRICKER,JANICE MARIE 258
127 E MISHAWAKA AVE
MISHAWAKA IN 46544

BRICKLEY,HARRY D GS 134
3266 N MERIDIAN 608
INDIANAPOLIS IN 46208

BRICKLEY,RICHARD AGAR GS 134
3266 N MERIDIAN STE 608
INDIANAPOLIS IN 46208

BRIDGE,BARTON C GP 286
JEFFERSON SQUARE
LAFAYETTE IN 47905

BRIDGE,THOS ARTHUR FP 082
FAMILY PRACTICE UNIT
3217 LAKE AVE
FORT WAYNE IN 46805

BRIDGES,ALVIN L FP 186
1302 MADISON AVE
ANDERSON IN 46011

BRIDGES,WM L R 082
2200 LAKE AVE SUITE 150
FORT WAYNE IN 46805

BRIGGS,ROBT WM IM 134
2140 N CAPITOL AVE
INDIANAPOLIS IN 46202

BRIGHT,THOMAS PETER 186
495 WESTFIELD ROAD
NOBLESVILLE, IN 46060

BRIGNONI,ANGEL M P 030
LOGANSPORT STATE HOSPITAL
LOGANSPORT IN 46947

BRILL,JOS B P 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

BRILLHART,JAMES RICHARD OBG 134
5506 E 16TH ST
INDIANAPOLIS IN 46218

BRINCKO,JOHN U 174
6111 HARRISON
MERRILLVILLE IN 46410

BRISSENDEN,REYNOLDS OM 134
320 N MERIDIAN ST ROOM 812
INDIANAPOLIS IN 46204

BRISTOL,HENRY MARK S GP 298
824 NORTH GAY
AUBURN AL 36830

BRITT,ROBT LEE PD 296
421 CHESTNUT ST
EVANSVILLE IN 47713

BRITTON,WELBON DUNLAP GP 218
R D 1
MONTEZUMA IN 47862

BROADIE,THOS ALLEN GS 134
8160 SYCAMORE ROAD
INDIANAPOLIS IN 46240

BROCKMAN,WILFRED J GP 114
439 E CHESTNUT ST
CORYDON IN 47112

BRODERSEN,JAMES DENNIS OPH 174
6850 HOHMAN AVE
HAMMOND IN 46324

BROGAN,THOS MICHAEL GP 134
1265 W 86TH STREET
INDIANAPOLIS IN 46260

BROMLEY,LUMAN W ORS 082
5717 SOUTH ANTHONY BLVD
FORT WAYNE IN 46806

BRONSON,PAUL JONES OBG 298
58 ALLENDALE
TERRE HAUTE IN 47802

BRONSON,WILLIAM W EM 314
202 S 32ND ST
RICHMOND IN 47374

BROOKS,FRED REYNOLDS GP 134
3500 LAFAYETTE RD
INDIANAPOLIS IN 46222

BROOMES,EDWARD LOUIS GP 174
PO BOX 3246
EAST CHICAGO IN 46312

BROSHEARS,KENNETH P GP 102
129 E VINCENNES ST
LINTON IN 47441

BROSIUS,ROBT HENRY WM GP 082
1603 WELLS ST
FORT WAYNE IN 46808

BROWN,ARCHIE EMMETT IM 134
5575 GULF BLVD APT 220
ST PETERSBURG FL 33706

BROWN,ARLIN EDWARD P 214
4315 E THIRD ST SUITE 7
BLOOMINGTON IN 47401

BROWN,DAVID F FP 298
1024 SOUTH 6TH ST
TERRE HAUTE IN 47807

BROWN,DAVID LEE DR 134
1604 NORTH CAPITOL
INDIANAPOLIS IN 46202

BROWN,DE WITT WILCOX P 134
1815 NORTH CAPITOL AVE NO 202
INDIANAPOLIS IN 46202

BROWN,EARL ROBT DR 134
5450 CHANNING ROAD
INDIANAPOLIS IN 46226

BROWN,FRANCES TURPIN GP 134
2126 N TALBOTT AVE
INDIANAPOLIS IN 46202

BROWN,FRANK MEUKLER GP 134
3351 NORTH MERIDIAN ST NO 101
INDIANAPOLIS IN 46208

BROWN,GARLAND RICHARD R 082
5522 W HAMILTON
FORT WAYNE IN 46804

BROWN,GEO EDWIN GP 158
P O BOX 328
GREENWOOD IN 46142

BROWN,GORDON T P 134
3266 N MERIDIAN STE 609
INDIANAPOLIS IN 46208

BROWN,JAMES RICHARD U 230
2102 E EVANS AVE
VALPARAISO IN 46383

BROWN,JAY ALBERT FP 296
3700 WASHINGTON AVE
EVANSVILLE IN 47750

BROWN,JOHN MICHAEL OBG 286
2400 FERRY ST
LAFAYETTE IN 47904

BROWN,JOHN STANLEY GP 282
R R GREENBRIER HILLS
SULLIVAN IN 47882

BROWN,KENNETH HOMER GP 078
1654 HEDDEN PARK
NEW ALBANY IN 47150

BROWN,LELAND G ORS 062
412 WHITE RIVER BLVD
MUNCIE IN 47303

BROWN,LEO RALPH GP 174
7863 BROADWAY STE 205
MERRILLVILLE IN 46410

BROWN,MARCEL SINCLAIR GP 214
R R # 1
HAINES CITY FL 33844

BROWN,RAYMOND LEE AN 296
P O BOX 3291
EVANSVILLE IN 47732

BROWN,RICHARD J U 126
400 S BERKLEY RD STE C
KOKOMO IN 46901

BROWN,ROBT MC DOWELL GP 098
521 MARION NATL BK
MARION IN 46952

BROWN,ROBT RAYMOND U 298
221 S 6TH ST
TERRE HAUTE IN 47801

BROWN,RONALD ROBT IM 314
1200 CHESTER BLVD
RICHMOND IN 47374

BROWN,STEWART DALE FP 062
349 W 1ST ST
ALBANY IN 47320

BROWN,THOS CISEL R 066
GOOD SAMARITAN HOSPITAL
DEPARTMENT OF RADIOLOGY
VINCENNES IN 47591

BROWN,THOS MARTIN IM 062
212 N PAULINE AVE
MUNCIE IN 47303

BROWN,WENDELL EDGAR PD 134
5005 E 72ND ST
INDIANAPOLIS IN 46250

BROWNE,THOS KELLER PUD 258
720 EAST CEDAR ST
SOUTH BEND IN 46617

BROWNING,CHAS A AN 314
900 S A ST
ROOM 205
RICHMOND IN 47374

BROWNING,JAMES STEPHEN P 134
3120 N MERIDIAN
INDIANAPOLIS IN 46208

BROWNING,WM MADISON OS 134
R #5 BOX 83
NORTH VERNON IN 47265

BROWNLEY,EMMA J PD 134
5623 WEST 29TH PLACE
INDIANAPOLIS IN 46224

BRUBAKER,HAROLD S AN 130
1515 DEL WEB BLVD
SUN CITY CENTER FL 33570

BRUBAKER,THOS ALBERT IM 174
9124 CHESTNUT LANE
MUNSTER IN 46321

BRUBECK,ROBT EUGENE GP 202
1400 E COLUMBUS ST
MARTINSVILLE IN 46151

BRUCKER,PERRY ALBERT PS 082
102 THREE RIVERS E
FORT WAYNE IN 46802

BRUCKMAN,JOS ALAN U 078
1919 STATE STREET
302 PROFESSIONAL ARTS BLDG
NEW ALBANY IN 47150

BRUECKMANN,F ROBERT ORS 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

BRUEGGE,THEODORE JOS OM 126
18406 PAZA VERDE DR
SUN CITY AZ 85373

BRUEGGEMANN,WALTER GEO OPH 014
411 PLAZA DR SUITE F
COLUMBUS IN 47201

BRUNDICK,EDWARD L ORS 296
611 HARRIET ST
EVANSVILLE IN 47710

BRYAN,FRANKLIN ABRAM OS 082
2101 COLISEUM EAST
FORT WAYNE IN 46805

BRYAN,ROBT EUGENE GP 206
705 N STATE ST
KENDALLVILLE IN 46755

BRYAN,STANTON L IM 296
607 HULMAN BLDG
EVANSVILLE IN 47708

BRYANT,EDWARD GAREY GP 174
PO BOX 3157
EAST CHICAGO IN 46312

BUBB,MICHAEL P IM 134
3130 N MERIDIAN
INDIANAPOLIS IN 46208

BUCHHOLZ,JAMES G ORS 082
2609 FAIRFIELD AVE
FORT WAYNE IN 46807

BUCHMAN,MARSHALL HARDING GP 078
1824 STATE ST
NEW ALBANY IN 47150

BUCK,RICHARD CRAIG FP 258
51916 US 31 NORTH
SOUTH BEND IN 46637

BUCK,RODGER LEWIS GP 214
9 CRANE AVE
SPENCER IN 47460

BUCKEL,LARRY JOS D 134
1500 ALBANY ST
BEECH GROVE IN 46107

BUCKINGHAM,RICHARD E GP 214
BOX 415
BLOOMINGTON IN 47401

BUCKLES,DAVID LUDY CLP 186
44 KNOLL RD
ANDERSON IN 46011

BUCKNER,GEO DOSTER GS 082
1003 FULTON ST
FORT WAYNE IN 46802

BUDDRUS,DAVID J PA 070
1127 MYRTLE STREET
ELKHART IN 46514

BUECHLER,JAMES RAYMOND FP 298
1513 N 6 1/2 ST
TERRE HAUTE IN 47804

BUECHLER,WM F GP 186
1817 SOUTH A ST
ELWOOD IN 46036

BUEHL,FREDERICK HELM P 162
520 SOUTH SEVENTH ST
VINCENNES IN 47591

BUEHL,ISABELLE ANN DAVIS PTH 134
R R 3 BOX 229
GREENWOOD IN 46142

BUEHLER,GEO MICHAEL GP 034
914 SPRINGDALE DR
JEFFERSONVILLE IN 47130

BUEHLMAN,KENNETH WAYNE PD 162
514 SOUTH 9TH ST
VINCENNES IN 47591

BUEHNER,DONALD CLEMENS FP 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

BUEHNER,DONALD F FP 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

BUELL,FORREST RAYMOND GP 038
314 LANKFORD ST
CLAY CITY IN 47841

BUKATA,PEDRO OBG 174
110 RIDGE ROAD
MUNSTER IN 46321

BULLARD,HARLAN R OPH 286
3510 WOODCLIFFE DRIVE
LAFAYETTE IN 47905

BULLERS,ROBT CLINTON GS 158
1111 N MAIN ST
FRANKLIN IN 46131

BULLINGTON,GEO EDWIN DR 158
1230 E KING
FRANKLIN IN 46131

BUNAG,HOMER UY OTO 174
WEST WING SUITE 31
800 MAC ARTHUR BLVD
MUNSTER IN 46321

BUNDY,VERNON GS 078
700 SPRING ST
NEW ALBANY IN 47150

BUNKER,LADOSKA ZEE GP 302
201 N MILL ST
NORTH MANCHESTER IN 46962

BUNTIN,PRESLEY THOS GS 134
725 FOREST BLVD
ZIONSVILLE IN 46077

BURCHAM,JAMES BENJ GP 150
MADISON STATE HOSP
MADISON IN 47250

BURDETTE,HAROLD F IM 134
6310 GLEN COE
INDIANAPOLIS IN 46260

BURG,HOWARD EDWIN IM 296
WELBORN CLINIC
421 CHESTNUT ST
EVANSVILLE IN 47713

BURGE,KELMAR M — O — 314
1400 CHESTER BLVD
RICHMOND IN 47374

BURGER,THOS C — GS — 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

BURGHARD,ROLLA DALE — EM — 134
4340 BERKSHIRE ROAD
INDIANAPOLIS IN 46226

BURK,JAMES MERRYMAN — GP — 010
115 N 30 ST
DECATUR IN 46733

BURKET,CECIL R — GP — 190
424 W SOUTH ST
BREMEN IN 46506

BURKHARDT,BOYD ALONZA — ABS — 290
P O BOX 375
120 WALNUT ST
TIPTON IN 46072

BURKHART,JAMES EDWARD — N — 314
SUITE 112
2519 EAST MAIN ST
RICHMOND IN 47374

BURKLE,ROBERT J — ORS — 298
2929 S 1ST ST
TERRE HAUTE IN 47802

BURNETT,ARTHUR BAKER — OPH — 122
801 MELODY LN
NEW CASTLE IN 47362

BURNEY,BRYAN T — 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

BURNIKEL,RAYMOND H — CRS — 296
2709 WASHINGTON
EVANSVILLE IN 47714

BURNS,ANTHONY JOHN — AN — 062
2810 ETHEL AVE
MUNCIE IN 47304

BURNS,JOHN T — PD — 286
2323 SOUTH ST
LAFAYETTE IN 47904

BURNS,PAUL EARLAND — GP — 062
121 E HIGH ST
MONTPELIER IN 47359

BURT,MICHAEL ROBT — PD — 134
1633 CAPITOL AVE
SUITE 408
INDIANAPOLIS IN 46202

BURT,ROBERT WM — NM — 134
1481 WEST 10TH STREET
INDIANAPOLIS IN 46202

BURTON,ROBT L — OM — 174
215 BROADWAY
GARY IN 46402

BUSH,CHAS EDGAR — GP — 042
1201 OAK ST
FRANKFORT IN 46041

BUSH,EDWARD ROBT — GP — 186
2101 JACKSON SUITE 111
ANDERSON IN 46014

BUSH,HARGIS ROBT — GP — 222
506 WASHINGTON ST
CANNELTON IN 47520

BUSH,JACK ARROWSMITH — AN — 286
1001 LIFE BLDG
LAFAYETTE IN 47901

BUSH,ROBT WILLITS — PTH — 014
BARTHOLOMEW COUNTY HOSPITAL
2400 EAST 17TH ST
COLUMBUS IN 47201

BUTLER,GEROLD THOMAS — PD — 134
5675 S EAST ST
INDIANAPOLIS IN 46227

BUTLER,JOHN OLIN — IM — 134
4949 CARSON AVE
INDIANAPOLIS IN 46227

BUTLER,RICHARD MARKLAND — OR — 314
REID MEMORIAL HOSPITAL
1401 CHESTER BLVD
RICHMOND IN 47374

BUTLER,ROBT MAURICE — PD — 134
3426 N MERIDIAN ST
INDIANAPOLIS IN 46208

BUTTERWORTH,JOS CHAS — U — 134
8220 NAAB ROAD APT 302
INDIANAPOLIS IN 46260

BUTTS,MILTON A — FP — 258
118 N WALNUT ST
SOUTH BEND IN 46628

BUYER,RICHARD — IM — 174
6111 HARRISON STREET
MERRILLVILLE IN 46410

BYLER,JOHN J — FP — 258
1002 LINCOLN WAY WEST
SOUTH BEND IN 46616

BYLLESBY,JOYCE ELAINE — PTH — 198
BOX 111
CRAWFORDSVILLE IN 47933

BYRN,JAMES RICHARD — PD — 062
CHILDRENS CLINIC INC
806 WEST JACKSON
MUNCIE IN 47305

BYRNE,DAVID ALLEN — D — 214
727 W 1ST ST
BLOOMINGTON IN 47401

BYRNE,ROBT JOS — FP — 162
207 N MAIN ST
BICKNELL IN 47512

BYUN,TAI SIK — OBG — 306
1116 MILLIS AVE
WARRICK HOSPITAL INC
BOONVILLE IN 47601

CABE,CLAUDIO M — AN — 174
431 FISHER PL APT D
MUNSTER IN 46321

CABIGAS,JOSE SOVISO — FP — 314
516 NATIONAL RD W
RICHMOND IN 47374

CABRERA,JUAN CABRERA — CHP — 296
NO 406
801 ST MARYS DR
EVANSVILLE IN 47715

CACDAC,FE JOSON — FP — 298
2929 S 1ST ST
TERRE HAUTE IN 47807

CACDAC,MANUEL ARCE — NS — 298
2929 SOUTH FIRST ST
TERRE HAUTE IN 47802

CADIENTE,SAMSON S — GS — 134
3266 N MERIDIAN
INDIANAPOLIS IN 46208

CAHN,HUGO M — OS — I34
6416 HOOVER RD APT D
INDIANAPOLIS IN 46260

CAHN,PETER H — OPH — I34
50 E 91ST SUITE 202
INDIANAPOLIS IN 46260

CAIN,DAVID ROBINSON — FP — 122
1912 BUNDY AVE
NEW CASTLE IN 47362

CAIN,JEFFREY L — OBG — 070
1400 HUDSON
ELKHART IN 46514

CAJACOB,MELVILLE EDWARD — FP — 298
1000 S 6TH ST
TERRE HAUTE IN 47807

CALDWELL,KENDALL W — R — 074
1941 VIRGINIA AVE
CONNERSVILLE IN 47331

CALDWELL,MARILYN R — P — 134
111 E 53D ST
INDIANAPOLIS IN 46220

CALDWELL,MILTON VICTOR — R — 298
6151 CLINTON RD
TERRE HAUTE IN 47805

CALHOON,JOHN PAUL — R — 118
1000 EAST MAIN ST
DANVILLE IN 46122

CALISTO,RUBEN A — FP — 030
U S 24 WEST
LOGANSPORT IN 46947

CALLAND,SABRA K WETZLER — P — 134
31 WEBB ROAD
WESTPORT CT 06880

CALLI,LOUIS JAMES — FP — 140
408 S STATE ST
NORTH VERNON IN 47265

CALLI,LOUIS JAMES — IM — 140
301 HENRY ST
JENNINGS CO HOSP
NORTH VERNON IN 47265

CAMACHO,ERNESTO M — FP — 306
P O BOX 160
242 WEST ADAMS
CHANDLER IN 47610

CAMARATA,JAMES CHAS — OR — 098
1195 E CHARLES RD
MARION IN 46952

CAMPAGNA,EDWARD A — PH — I74
3406 GUTHRIE ST
EAST CHICAGO IN 46312

CAMPBELL,FRANK — FP — I86
1302 MADISON AVE
ANDERSON IN 46011

CAMPBELL,H EDWIN — OBG — 134
8220 NAAB ROAD
SUITE 107
INDIANAPOLIS IN 46260

CAMPBELL,PATRICK B — PD — 070
605 OAKLAND AVE
ELKHART IN 46514

CAMPBELL,RICHARD WM — CD — 134
3625 EAST 71ST
INDIANAPOLIS IN 46220

CAMPBELL,ROBT L — NS — 134
I U MEDICAL CTR
INDIANAPOLIS IN 46202

CAMPBELL,WM THOS — AN — 214
615 W 1ST ST
BLOOMINGTON IN 47401

CANNON,DANL HUMPHREYS — FP — 078
1201 E SPRING ST
NEW ALBANY IN 47150

CANNON,DAVID R — R — 034
1220 MISSOURI AVE
JEFFERSONVILLE IN 47130

CANTWELL,EDGAR RICHARD — OPH — 162
P O BOX 979
VINCENNES IN 47591

CAPELLO,WILLIAM N — ORS — 134
1100 W MICHIGAN ST
DEPT OF ORTHOPAEDIC SURGERY
INDIANAPOLIS IN 46223

CAPLIN,IRVIN — A — 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

CAPUTI,SAVERIO R 134
SUITE C2
534 TURTLE CREEK N DR
INDIANAPOLIS IN 46227

CARAS,JOHN ANTHONY IM 134
5506 E 16TH #27
INDIANAPOLIS IN 46218

CARBERRY,GEO AUGUST OBG 174
8127 MERRILLVILLE ROAD
MERRILLVILLE IN 46410

CAREY,JOHN ALBERT FP 174
2964 W 11TH ST
GARY IN 46404

CARLOS,CRISOSTOMO J CDS 174
7895 BROADWAY
MERRILLVILLE IN 46410

CARLSON,DAVID J GS 296
611 HARRIET ST
EVANSVILLE IN 47710

CARLSON,RALPH FREDERICK TS 296
611 HARRIET ST
EVANSVILLE IN 47710

CARMODY,RAYMOND F OPH 174
5284 BROADWAY
GARY IN 46408

CARPENTER,BENNIE F IM 174
123 N COURT ST
CROWN POINT IN 46307

CARPENTER,DONALD JACK OPH 298
600 SYCAMORE BLDG
TERRE HAUTE IN 47807

CARPENTER,JAMES BEDFORD FP 286
49 N 26TH ST
LAFAYETTE IN 47904

CARPENTER,PRAMOD K PTH 258
531 N MAIN ST
SOUTH BEND IN 46601

CARPENTER,ROBT SCHOFIELD EM 286
2170 TECUMSEH PARK LANE
WEST LAFAYETTE IN 47906

CARPENTIER,JAMES ROBT IM 178
900 I ST
LA PORTE IN 46350

CARPO,SUSAN B AN 174
600 GRANT ST
METHODIST HOSP OF GARY INC
GARY IN 46402

CARR,JOE HENDERSON FP 034
HENRYVILLE IN 47126

CARREL,EDSON DREW ORS 186
30 RIVER FOREST
ANDERSON IN 46011

CARREL,FRANCIS EDSON EM 286
6705 KANATA
FORT WAYNE IN 46815

CARROLL,BERTHA ROSE OS 286
4 JEWETT LANE
SOUTH HADLEY MA 01075

CARROLL,JOHN CLAYSON GS 010
226 S 2D ST
DECATUR IN 46733

CARROLL,MARY E DAVIS FP 174
124 N MAIN ST
CROWN POINT IN 46307

CARRUTHERS,WALLACE B GS 058
DEKALB MEDICAL ARTS CENTER
P O BOX 586
AUBURN IN 46706

CARTER,ARNOLD LAWRENCE FP 062
2605 W RIGGIN RD
MUNCIE IN 47304

CARTER,CHAS BENJ NEP 134
1633 NORTH CAPITOL AVE
SUITE #722
INDIANAPOLIS IN 46202

CARTER,EUNICE M MAIER PD 106
585 SHERIDAN RD
NOBLESVILLE IN 46060

CARTER,F R NICHOLAS PH 258
124 S JACOB
SOUTH BEND IN 46617

CARTER,JAMES EDWARD OBG 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

CARTER,JEAN VAL FP 290
130 N MAIN ST.
TIPTON IN 46072

CARTER,JOHN OREN FP 174
295 S WISCONSIN ST
HOBART IN 46342

CARTWRIGHT,GLEN WILLARD PD 286
723 GREENLEE DR
INDIANAPOLIS IN 46234

CARTY,CHAS BOYD FP 310
P O BOX 36
PEKIN IN 47165

CASEY,STANLEY MC CLURE FP 130
1465 N LAFONTAINE ST
HUNTINGTON IN 46750

CASSADY,J VERNAL OPH 258
208 SHERLAND BLDG
SOUTH BEND IN 46601

CASSADY,JAMES EDWIN IM 134
2010 W 86TH ST
INDIANAPOLIS IN 46260

CASSADY,JOHN RUE OPH 258
208 SHERLAND BLDG
SOUTH BEND IN 46601

CASSIM,RECHAD M — PD — 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

CAST,WILLIAM RONALD — OTO — 082
4601 N WASHINGTON RD
FORT WAYNE IN 46804

CASTOR,CONRADO P — CD — 174
2167 GETTLER ST
DYER IN 46311

CASTOR,KENNETH C — PD — 082
3124 E STATE BLVD
FORT WAYNE IN 46805

CASTRO,IGNACIO B — GS — 262
685 WANDA ST
SCOTTSBURG IN 47170

CASTUERAS,FLOR TAYLAN — FP — 310
P O BOX 428
SALEM IN 47167

CATTELL,LEE M — ORS — 134
555 FOREST BLVD
INDIANAPOLIS IN 46240

CAUDILL,RODNEY C — P — 062
P O BOX 427
YORKTOWN IN 47396

CAVINS,ALEXANDER W — GYN — 298
R R 25 BOX 172
TERRE HAUTE IN 47802

CAVINS,JOHN ALEXANDER — HEM — 134
8220 NAAB RD
SUITE NO 105
INDIANAPOLIS IN 46260

CAYLOR,CHAS H — U — 318
303 S MAIN ST
BLUFFTON IN 46714

CAYLOR,HAROLD DELOS — GS — 318
303 S MAIN ST
BLUFFTON IN 46714

CAYLOR,TRUMAN E — U — 318
303 S MAIN ST
BLUFFTON IN 46714

CEBEDO,JAIME J — R — 174
540 TYLER
GARY IN 46402

CESPEDES,CARLOS ALBERTO — GS — 174
101 N GRIFFITH BLVD
GRIFFITH IN 46319

CHA,JIN SUCK — OBG — 174
7905 CALUMET
MUNSTER IN 46321

CHABENNE,BAHJAT S — GS — 134
1213 N ARLINGTON
INDIANAPOLIS IN 46219

CHADWICK,MICHAEL JOS — IM — 014
3384 WOODLAND PKWY
COLUMBUS IN 47201

CHAEL,THOS C — US — 174
7905 CALUMET AVE
MUNSTER IN 46321

CHALLMAN,WM BOWER — FP — 296
715 1ST AVE STE 22
EVANSVILLE IN 47710

CHAMBERLAIN,DONALD S — R — 258
919 E JEFFERSON STE 207
SOUTH BEND IN 46622

CHAMBERS,ALAN R — US — 082
103 THREE RIVERS E
FORT WAYNE IN 46802

CHAMBERS,CAROL RUDOLPH — FP — 246
CHAMBERS MED CLINIC INC
UNION CITY IN 47390

CHAMBERS,DONALD CALVERT — OM — 082
1300 SOUTH CLINTON ST
FORT WAYNE IN 46802

CHAMBERS,LEROY BAKER — FP — 246
CHAMBERS MED CLINIC
UNION CITY IN 47390

CHAMBERS,RICHARD KELLY — IM — 186
1431 NORTH MADISON AVE
ANDERSON IN 46012

CHAMBLEE,ROLAND W — FP — 258
336 N NOTRE DAME ST
SOUTH BEND IN 46617

CHAN,MACARIO ONG — AN — 296
LAWNDALE STATION
P O BOX 5447
EVANSVILLE IN 47715

CHAN,PAULINO Y — ORS — 174
800 MAC ARTHUR BLVD
MUNSTER IN 46321

CHANDLER,JAMES DUNCAN — FP — 206
125 BAUM ST
AVILLA IN 46710

CHANDLER,LEON HARVEY — GS — 070
112 E LINCOLN AVE
GOSHEN IN 46526

CHANG,ILWOONG — IM — 174
PLAZA DEL PRADO
9337 CALUMET
MUNSTER IN 46321

CHAPMAN,WM EDWARD — U — 134
8220 NAAB ROAD #302
INDIANAPOLIS IN 46260

CHAPPEL,ALFRED TRUMAN — FP — 158
901 N MAIN ST
FRANKLIN IN 46131

CHASE,JAMES ALLAN — OM — 082
1635 BROADWAY
FORT WAYNE IN 46804

CHATTIN,HERBERT ODELL — FP — 162
729 MAIN ST
VINCENNES IN 47591

CHATTIN,ROBT EARL — FP — 046
102 WOOD
LOOGOOTEE IN 47553

CHATTIN,VANCE JOHN — GS — 046
514 E MAIN ST
WASHINGTON IN 47501

CHATTIN,WM R — PD — 134
5430 E 21ST
INDIANAPOLIS IN 46218

CHAU,ANDREW YIU-SUEN — GS — 298
1645 N 7TH ST
TERRE HAUTE IN 47804

CHAVEZ,MAURO EMIGDIO — OBG — 134
2840 N HIGH SCHOOL RD
SPEEDWAY IN 46224

CHEEK,JACK ALLAN — PD — 296
401 S E SIXTH ST
EVANSVILLE IN 47710

CHEN,JAMES J — ORS — 174
SUITE 14 800 MAC ARTHUR
MUNSTER IN 46321

CHEN,JAMES Z W — TR — 134
2634 JAY COURT
INDIANAPOLIS IN 46229

CHEN,KO KUEI — PA — 134
7975 HILLCREST RD
INDIANAPOLIS IN 46240

CHEN,TZENG-CHIH — IM — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

CHENG,SYLVIA SIU-FAN — P — 030
SOUTHEASTERN MED CTR
WALTON IN 46994

CHERMEL,IVAN LEONARD — DR — 174
7905 CALUMET AVE
MUNSTER IN 46321

CHERNISH,STANLEY M — OS — 134
4403 RADNOR RD
INDIANAPOLIS IN 46226

CHEUNG,AMY A — PD — 134
6484 CHESTER AVE
INDIANAPOLIS IN 46260

CHEVALIER,ROBT BURRIS — IM — 134
101 N 17TH ST ST FRANCIS HOS
BEECH GROVE IN 46107

CHILDERS,LISA ANN — IM — 134
8402 HARCOURT ROAD
SUITE 309
INDIANAPOLIS IN 46260

CHIP,JEROLD NORMAN — CD — 174
7863 BROADWAY
MERRILLVILLE IN 46410

CHIU,FANG LUKE — OBG — 158
1507 NORTH MAIN ST
FRANKLIN IN 46131

CHIVAPRUK,CHARAT — AN — 174
3707 W 108TH ST
CROWN POINT IN 46307

CHIVINGTON,PAUL V — D — 134
1815 N CAPITOL AVE RM 414
INDIANAPOLIS IN 46202

CHMIELEWSKI,STANLEY ROBT — OPH — 314
2519 EAST MAIN ST
RICHMOND IN 47374

CHO,FRED S — IM — 174
9129 SOUTHWOOD DR
MUNSTER IN 46321

CHO,HUN-KOO — OBG — 258
513 N MICHIGAN ST
SOUTH BEND IN 46601

CHOE,YOUNG — FP — 306
1116 MILLIS AVE
WARRICK HOSPITAL INC
BOONVILLE IN 47601

CHOI,STEPHEN S — ORS — 126
402 S BERKLEY RD
KOKOMO IN 46901

CHONA,ALFREO — FP — 174
1052 AZALEA DR
MUNSTER IN 46321

CHOSLOVSKY,SYDNEY — R — 174
METHODIST HOSP
GARY IN 46402

CHOW,PHILIP P — 296
OUTER LINCOLN AVE
EVANSVILLE STATE HOSPITAL
EVANSVILLE IN 47715

CHRISTEN,SAMUEL ELLIS — OPH — 082
347 WEST BERRY
FORT WAYNE IN 46802

CHRISTENSEN,CHAS NEIL — PD — 134
689 HOLLIDAY LANE
INDIANAPOLIS IN 46260

CHRISTIE,MARVIN CRANE — FP — 134
3340 E LORETTA
INDIANAPOLIS IN 46227

CHRONIAK,WALTER — IM — 134
41 N SHORTRIDGE RD
INDIANAPOLIS IN 46219

CHU,JOHNSON C S — P — 030
LOGANSPORT STATE HOSP
LOGANSPORT IN 46947

CHUA,FARIDA ISIP US I74
7895 BOWY
MERRILLVILLE IN 46410

CHUA,FELIPE S COS I74
7895 BROADWAY
MERRILLVILLE IN 46410

CHUA,GONZALO TAN R I34
655 YOSEMITE OR
INDIANAPOLIS IN 46217

CHUBE,DAVID DEMARET FP I74
1649 BROADWAY
GARY IN 46407

CHUNG,ANDREW IL-SUNG FP I86
4019 COLUMBUS AVE
ANDERSON IN 46014

CHUNG,DOUG JAE OBG I74
9333 CALUMET AVE SUITE D
MUNSTER IN 46321

CHY-KOA,LETICIA K PD I74
110 RIDGE RD
MUNSTER IN 46321

CLARK,CHAS MALCOLM IM I34
1481 WEST 10TH ST
INDIANAPOLIS IN 46202

CLARK,EDWARD EDMUND FP I34
3363 NORTH CENTRAL AVE
INDIANAPOLIS IN 46205

CLARK,ERIC DANL FP I18
100 MEADOW DR
DANVILLE IN 46122

CLARK,GEO ALEXANDER OPH I34
50 E 91ST ST
SUITE 214
INDIANAPOLIS IN 46240

CLARK,JACK PROW FP 070
303 S HUNTINGTON ST
SYRACUSE IN 46567

CLARK,LAWSON J OBG I34
2425 EAST KESSLER BLVD
INDIANAPOLIS IN 46220

CLARK,LINTNER EARL R 062
2425 E KESSLER BLVD
INDIANAPOLIS IN 46220

CLARK,ROBT M OPH 062
2809 GOODMAN AVE
MUNCIE IN 47304

CLARK,THOS W IM 296
421 CHESTNUT
EVANSVILLE IN 47713

CLARK,WM B FP 034
435 SPRING ST
JEFFERSONVILLE IN 47130

CLARK,WM HEMENWAY OTO 258
1544 WILDFLOWER WAY
SOUTH BEND IN 46617

CLARK,WM RUSSELL IM 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

CLARK,WM RUSSELL FP 082
3622 SOUTH CALHOUN ST
FORT WAYNE IN 46807

CLARKSON,CLARENCE G FP 314
300 GREENBRIER DRIVE
RICHMOND IN 47374

CLARO,JOS JOHN AM I74
2815 INDIANAPOLIS BLVD
WHITING IN 46394

CLASSEN,PETE R C FP 070
23919 U S 33 E
ELKHART IN 46514

CLAY,ELEANOR IM 014
3402 GROVE PL
COLUMBUS IN 47201

CLAYTON,DAVID LEE FP 258
206 EAST BARTLETT ST
SOUTH BEND IN 46601

CLAYTON,ROBERT THOMAS ORS I34
2020 W 86TH ST
INDIANAPOLIS IN 46260

CLEARY,ROBERT E OBG I34
9048 YELLOWWOOD COURT
INDIANAPOLIS IN 46260

CLEMENTE,JOSE PERALEJO FP 314
4400 SOUTH B ST
RICHMOND IN 47374

CLEMENTS,ROBERT E EM 110
120 W MC KENZIE RD
GREENFIELD IN 46140

CLEVINGER,WM GERALD PTH I26
1907 W SYCAMORE ST
ST JOSEPH MEMORIAL HOSP
KOKOMO IN 46901

CLINE,CHAS THEODORE GE 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

CLINE,DONALD LEE OBG I34
2020 WEST 86TH ST
INDIANAPOLIS IN 46260

CLINE,KENNETH LAMAR FP 258
BOX 57
WYATT IN 46595

CLOONAN,TIMOTHY GILBERT OR 162
4 WARREN CIRCLE
VINCENNES IN 47591

CLOUSE,JOHN FRANKLIN FP 062
BALL STATE UNIV HLTH SERVICE
MUNCIE IN 47306

CLUNIE,WM ADAMS OPH I30
323 W PARK DR
HUNTINGTON IN 46750

CLUTTER,ROBT EDWARD FP 134
8060 KNUE RD #120
INDIANAPOLIS IN 46250

COATS,STEPHEN E OBG 082
DUEMLING CLINIC
2828 FAIRFIELD AVE
FORT WAYNE IN 46805

COBB,CLARENCE M PTH 290
TIPTON CO HOSPITAL
LABORATORY
TIPTON IN 46072

COBB,DONALD PITT OBG 296
1401 SOUTH RIVER RD
EVANSVILLE IN 47715

COBLE,FRANK HAROLD OPH 314
51 S 8TH ST
RICHMOND IN 47374

COCHRAN,HARRY ADAM OS 082
706 NIGHTFALL RD
FORT WAYNE IN 46819

COCKERILL,EDWARD MEEKS R 134
8749 GREEN BRAES S DR
INDIANAPOLIS IN 46234

COCKRELL,DALE KETE FP 134
8224 MADISON AVE
INDIANAPOLIS IN 46227

CODDENS,AVERY L FP 018
STATE RD 55
FOWLER IN 47944

COFFEL,MELVIN HOOKER OPH 162
214 BUNTIN ST SUITE 104
VINCENNES IN 47591

COFIELD,DONALD DEAN OPH 214
811 WEST 2ND ST
BLOOMINGTON IN 47401

COGGESHALL,WARREN EVART CD 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

COHEN,HYMAN LEWIS N 230
204 LAKESIDE
VALPARAISO IN 46383

COHEN,IRVING FP 134
645 E MAIN ST
PLAINFIELD IN 46168

COHN,ALVIN FRANK AN 134
1338 WEST CURRY RD
GREENWOOD IN 46142

COLE,LARRY GENE FP 062
1003 EAST SMITH STREET
YORKTOWN IN 47396

COLE,STEPHEN LEROY FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

COLEMAN,FLOYD BUTLER FP 058
WASTERLOO IN 46793

COLEMAN,JOS EDWIN PD 296
801 ST MARYS DR SUITE 203
EVANSVILLE IN 47715

COLLIER,JOHN WM FP 210
RR NO 2
FRENCH LICK IN 47432

COLLINS,HUBERT LOWELL FP 134
6745 E 10TH ST
INDIANAPOLIS IN 46219

COLLINS,JACK TEMPEST CD 318
303 S MAIN ST
BLUFFTON IN 46714

COLLINS,JOHN B FP 070
236 SIMPSON AVE
ELKHART IN 46514

COLLINS,ROBT CARL FP 134
3440 N MERIDIAN
INDIANAPOLIS IN 46208

COLVIN,ROBT CLYDE FP 306
333 STATE ST
NEWBURGH IN 47630

COLYER,ROBERT ALLAN ORS 134
1100 WEST MICHIGAN STREET
INDIANAPOLIS IN 46202

COMBS,DANL JOHN IM 162
400 SOUTH 6TH ST
VINCENNES IN 47591

COMBS,HERMAN TOW FP 296
807 W INDIANA ST
EVANSVILLE IN 47710

COMBS,JOHN HAROLD AN 296
R R 3
BLOOMFIELD IN 47424

COMBS,RICHARD C IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

COMEAU,WM JOS R 098
918 HAWTHORNE RD
MARION IN 46952

COMPTON,GEO LEONARD FP 290
219 N INDEPENDENCE ST
TIPTON IN 46072

COMPTON,WALTER AMES OS 070
2225 GREENLEAF BLVD
ELKHART IN 46514

CONKLIN,JAMES OLIVER GS 298
502 TRIBUNE BLDG
TERRE HAUTE IN 47801

CONKLIN,JOHN T P 078
PROFESSIONAL ARTS BUILDING
SUITE 321
NEW ALBANY IN 47150

CONKLIN,RAYMOND LE ROY OM 070
215 SWANSON CIRCLE W
SOUTH BEND IN 46615

CONLEY,JOHN ELLIS FP 082
620 W BERRY ST
FORT WAYNE IN 46802

CONLEY,MICHAEL KENNETH OBG 134
449 BIG HILL CIR APT E
INDIANAPOLIS IN 46224

CONLEY,THOS MARION OBG 126
2811 DELLWOOD DRIVE
KOKOMO IN 46901

CONNELL,VACTOR O FP 190
114 N WASHING ST
BOURBON IN 46504

CONNELLY,JERRY HUBBARD FP 082
4306 LAKE ST
FORT WAYNE IN 46815

CONNELLY,RICHARD DONALD FP 082
4310 LAKE AVE
FORT WAYNE IN 46815

CONNER,ROBT ALLISON R 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

CONNERLEY,MARION L GS 298
107 S 7TH ST
TERRE HAUTE IN 47801

CONNERLY,PATRICK WM FP 254
604 EAST 11TH ST
RUSHVILLE IN 46173

CONNORS,JAMES J PED 296
421 CHESTNUT STREET
EVANSVILLE IN 47713

CONRAD,EVERETT LEROY FP 038
1207 E NATIONAL AVE
BRAZIL IN 47834

CONRAD,HENRY WEBB FP 050
4 CLINIC DRIVE
LAWRENCEBURG IN 47025

CONROY,MICHAEL DENNISON FP 258
3123 MISHAWAKA AVE
SOUTH BEND IN 46615

CONSTAN,EVAN P 178
BOX 473
WESTVILLE IN 46391

CONWAY,GLENN US 134
2235 S GARFIELD DRIVE
INDIANAPOLIS IN 46203

CONWAY,LOUIS WM NS 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

CONWAY,THOS J PD 298
221 S 6TH ST
TERRE HAUTE IN 47807

COOK,DEAN L R 258
P O BOX 4016
SOUTH BEND IN 46635

COOK,GORDON C OBG 258
513 N MICHIGAN STREET
SOUTH BEND IN 46601

COOK,MELVIN DUANE GS 078
1919 STATE ST 202
NEW ALBANY IN 47150

COOK,RICHARD OWEN FP 174
535 W 35TH AVE
GARY IN 46408

COOK,ROBT GIBSON OTO 318
1225 SUMMIT AVE
BLUFFTON IN 46714

COOK,THOMAS LYNN DR 296
25 JOHNSON PLACE
EVANSVILLE IN 47714

COOKE,JOHN VINCENT R 314
2121 SOUTH 23RD STREET
RICHMOND IN 47374

COOKSON,LAWRENCE UPJOHN R 134
360 W 62ND ST
INDIANAPOLIS IN 46240

COOLEY,PAUL PHILLIP FP 062
2200 W MC GALLIARD
MUNCIE IN 47304

COONEY,CHAS JOHN U 082
527 W BERRY ST
FORT WAYNE IN 46802

COONS,FREDERICK WM P 214
2115 EAST 3RD ST
BLOOMINGTON IN 47401

COONS,RITCHIE FP 022
404 WEST CAMP
LEBANON IN 46052

COOPER,B TRENT FP 082
155 8TH ST
BOX 99
ROANOKE IN 46783

COOPER,DANL F NS 134
SUITE 408
1633 N CAPITOL AVE
INDIANAPOLIS IN 46202

COOPER,JOHN FREDRICK FP 062
3022 S MADISON
MUNCIE IN 47302

COOPER,JOHN IRWIN D 150
124 WEST 3RD ST
MADISON IN 47250

COOPER,LEO KENNETH OS 174
1112-35TH
GRIFFITH IN 46319

COOPER,WALLER WALLACE AN 296
819 CANTERBURY
EVANSVILLE IN 47715

COOPER,WM EARL OTO 014
NATIONAL ROAD PROF PLAZA
3200 SYCAMORE CT SUITE 1-A
COLUMBUS IN 47201

COOPERMAN,ALAN S DR 082
2802 EAST STATE STREET
FORT WAYNE IN 46805

COPE,STANTON ELIJAH AN 130
1022 N JEFFERSON ST
HUNTINGTON IN 46750

COPELAND,JOS CONRAD IM 186
4351 MAC RONALD DR
LA MESA CA 92041

COPHER,DAVID E OBG 134
3266 N MERIDIAN APT 404
INDIANAPOLIS IN 46208

CORCORAN,PATRICK J V IM 296
P O BOX 3287
EVANSVILLE IN 47701

CORDANO,ANGEL NTR 296
2404 PENNSYLVANIA
EVANSVILLE IN 47721

CORMICAN,HERBERT LEROY OBG 070
1400 HUDSON ST
ELKHART IN 46514

CORNACCHIONE,MATTHEW FP 134
510 W HUNTERS DRIVE
CARMEL IN 46032

CORPE,KENNETH F GS 254
R D 4
RUSHVILLE IN 46173

CORRAO,THOS JOS FP 034
435 E SPRING
JEFFERSONVILLE IN 47130

CORRIGAN,MARK WELLER AN 134
4437 FOUR SEASONS CIRCLE
INDIANAPOLIS IN 46226

CORTESE,JAMES V FP 134
6302 MINLO
INDIANAPOLIS IN 46227

CORTESE,THOS A D 134
3530 S KEYSTONE #102
INDIANAPOLIS IN 46227

CORTESE,THOS ANTHONY GS 134
3901 S EAST ST
INDIANAPOLIS IN 46227

COSIO,JULIO ELIO FP 034
1206 SPRING ST
JEFFERSONVILLE IN 47130

COSTELLO,ALBERT J OBG 174
110 RIDGE RD
MUNSTER IN 46321

COSTIN,ROBT LEE PTH 134
301 EAST 38TH ST
INDIANAPOLIS IN 46205

COTTER,EDWARD RICHARD GS 174
2415 169TH ST
HAMMOND IN 46323

COTTOM,DAVID LEE IM 296
NEPHROLOGY ASSOCIATES
801 ST MARYS DRIVE SUITE 501
EVANSVILLE IN 47715

COTTRELL,ROBT FRANKLIN AN 082
5800 FAIRFIELD AVE
FORT WAYNE IN 46807

COUCH,WILLIAM H ORS 082
5050 NORTH CLINTON
FORT WAYNE IN 46825

COUGHENOUR,J ROBT FP 134
534 TURTLE CREEK DR N
INDIANAPOLIS IN 46227

COULON,THOS FRANCIS GS 062
R R 6-15 FINLANDIA PL
MUNCIE IN 47302

COULTER,MERLIN KENNETH FP 046
1400 GRAND AVE
WASHINGTON IN 47501

COUNTRYMAN,FRANK W P 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

COURSEY,JAMES O FP 190
P O BOX 479
PLYMOUTH IN 46563

COVALT,WENDELL EARL GS 062
304 ALDEN RD
MUNCIE IN 47304

COVELL,HARRY MENLO FP 058
127 W 7TH ST
AUBURN IN 46706

COVEY,THOS JAMES PD 230
756 N 200 W
VALPARAISO IN 46383

COVINGTON,CONSTANCE JOAN FP 230
1101 GLENDALE
VALPARAISO IN 46383

COWAN,JOHN THOS OBG 082
3124 EAST STATE BLVD
FORT WAYNE IN 46805

COWEN, R 296
401 SE 6TH STREET
EVANSVILLE IN 47713

COX,ALFRED CHARLES FP 258
51916 US 31 N
SOUTH BEND IN 46637

COX,LARRY LA VON EM 296
FISCHER RD
R R #1 BOX 215
ELBERFELD IN 47613

COX,LEON THOMPSON FP 314
1210 E MAIN ST
RICHMOND IN 47374

COYNER,ALFRED BRUCE FP 286
R D 1
CLARKS HILL IN 47930

CRABBE-FORBES,VIOLET M FP 322
WOLCOTT IN 47995

CRAFT,KENNETH L A 134
2245 S SHERIDAN
INDIANAPOLIS IN 46203

CRAIG,ALEXANDER F AN 134
SUITE 115
5435 EMERSON WAY NORTH
INDIANAPOLIS IN 46226

CRAIG,HARRY LEROY FP 066
LELAND HEIGHTS
HUNTINGBURG IN 47542

CRAIG,REUBEN ALLEN PD 126
514 W SUPERIOR ST
KOKOMO IN 46901

CRAIG,RICHARD MORTON R 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

CRAIG,ROBT ALEXANDER FP 070
303 SOUTH HUNTINGTON ST
SYRACUSE IN 46567

CRAMER,SAML KEITH IM 134
1303 N ARLINGTON
INDIANAPOLIS IN 46219

CRANE,DAVID GOODRICH P 214
1710 PUMPKINVINE HILL RD
MARTINSVILLE IN 46151

CRANE,DAVID M EM 296
600 MARY ST
EVANSVILLE IN 47747

CRATES,GORDON COLVIN FP 194
DENVER MED CLINIC BOX 188
DENVER IN 46926

CRAVENS,FREDERICK A OBG 134
7654 HOLLIDAY DR WEST
INDIANAPOLIS IN 46260

CRAVENS,ROBERT E ORS 134
8402 HARCOURT RD SUITE 809
INDIANAPOLIS IN 46260

CRAWFORD,JAMES HARVEY FP 296
611 HARRIET ST-STE 402
EVANSVILLE IN 47710

CRAWFORD,JOHN A ORS 134
8220 NAAB ROAD # 203
INDIANAPOLIS IN 46260

CRAWFORD,JOHN N R 082
2200 LAKE AVE
FORT WAYNE IN 46805

CRAWFORD,THEODORE R EM 126
201F BLUFFS CIRCLE
NOBLESVILLE IN 46060

CREASSER,CHAS WM AN 258
604 NORTH MICHIGAN ST
SOUTH BEND IN 46601

CREBO,ALAN R OPH 126
3433 SOUTH LA FOUNTAIN
KOKOMO IN 46901

CREED,GARY ST CLAIR FP 134
7513 SOUTHEASTERN AVENUE
INDIANAPOLIS IN 46239

CREEK,JEAN A IM 214
419 WEST 1ST STREET
BLOOMINGTON IN 47401

CRISE,JOHN ROBT FP 230
2674 PORTAGE MALL
PORTAGE IN 46368

CRIST,JOHN R FP 234
1900 W 4TH ST H WAY 62 W
SUITE 1
MOUNT VERNON IN 47620

CRISTEE,JAMES WARREN IM 298
400 8TH AVE
TERRE HAUTE IN 47804

CROCKETT,WAYNE ALBERT IM 298
1024 S 6TH ST
TERRE HAUTE IN 47807

CROFT,WM VAN FP 078
1919 STATE ST
205 PROF ARTS BLDG
NEW ALBANY IN 47150

CROMER,JAMES STEPEN PD 134
5430 E 21ST ST
INDIANAPOLIS IN 46218

CRON,WM JAMES D 214
725 WEST IST STREET
BLOOMINGTON IN 47401

CRONIN,H JOS R 134
COMMUNITY HOSP X RAY DEPT
1500 N RITTER
INDIANAPOLIS IN 46219

CROSBY,REID CLIPP OBG 182
2900 W 16TH ST
BEDFORD IN 47421

CROSS,DAVID GEO EM 134
5643 BRENDON FOREST DRIVE
INDIANAPOLIS IN 46226

CROSS,RICHARD WESLEY OBG 166
2251 DUBOIS DR
WARSAW IN 46580

CROSSIN,JAMES ALOYSIUS GS 134
1815 N CAPITAL
INDIANAPOLIS IN 46202

CROWDER,JAMES H FP 282
112 N SECTION ST
SULLIVAN IN 47882

CRUDDEN,CHAS H P 296
6600 WASHINGTON AVE
EVANSVILLE IN 47715

CSICSKO,JOHN FRANCIS TS 082
2828 FAIRFIELD AVE
FT WAYNE IN 46807

CUFF,STEVE COLLEY R 082
700 W BROADWAY
FORT WAYNE IN 46802

CULBERTSON,CLYDE G PTH 134
R R 5 BOX 72
NASHVILLE IN 47448

CULBERTSON,KENNETH LEE PO 258
211 NORTH EDDY ST
SOUTH BEND IN 46617

CULLISON,JOHN L IM 062
BALL MEMORIAL HOSP
MUNCIE IN 47303

CULLNANE,CHRIS WALTER GS 296
2312 W FRANKLIN ST
EVANSVILLE IN 47712

CULP,JOHN EWART OIA 082
2902 FAIRFIELD AVE
FORT WAYNE IN 46807

CUMMING,JAMES ROOD PO 134
8801 NORTH MERIDIAN ST NO 308
INDIANAPOLIS IN 46260

CUMMINS,DOUGLAS F AN 134
13 BRIARPATCH ROAD
BARGERSVILLE IN 46106

CUMMINS,LARRY EDWARD CHP 082
2805 FAIRFIELD AVENUE
FORT WAYNE IN 46807

CUNNINGHAM,CAROLYN ANN IM 134
3388 MANNING ROAD
INDIANAPOLIS IN 46208

CUNNINGHAM,ROBT DANA IM 098
500 WABASH AVE
MARION IN 46952

CURE,CHAS WM NS 014
2760-25TH ST
COLUMBUS IN 47201

CURE,ELMER T P 062
801 ASHLAND AVE
MUNCIE IN 47305

CURETON,EDWARD ERVINE P 214
217 EAST 1ST ST
BLOOMINGTON IN 47401

CURRIE,ROBT WM DR 082
7106 BOHNKE DRIVE
FORT WAYNE IN 46815

CURRY,R LOUIS FP 134
5707 E 38TH ST
INDIANAPOLIS IN 46218

CUSICK,JAMES ALAN AN 134
11119 ST ANDREWS LANE
CARMEL IN 46032

CUSTODIO,CAMIA ACEVEDO AN 174
12501 S MOODY AVE
PALOS HEIGHTS IL 60463

CUTHBERT,MARVIN P OPH 134
3266 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

CUTSHALL,WILLIAM O 214
901 W FIRST ST
BLOOMINGTON IN 47401

CYR,JAMES D 018
EAST & LINGLE STS
FOWLER IN 47944

CZENKUSCH,HELEN E GEYER PD 134
2840 N HIGH SCHOOL RD
SPEEDWAY IN 46224

DACQUISTO,MICHAEL P IM 166
424 S BUFFALO ST
WARSAW IN 46580

DAFTARY,ALI AKBAR IM 250
78 WEST BROOK DR
BATESVILLE IN 47006

DAFTARY,MOSTAFA GS 054
333 EAST FIRST ST
GREENSBURG IN 47240

DAGGY,JAMES R FP 314
47 S 24TH ST
RICHMOND IN 47374

DAHLING,FRED WALDEMAR FP 082
DAHLING BLDG
NEW HAVEN IN 46774

DAINKO,ALFRED JOS GS 174
618 118TH STREET
WHITING IN 46394

DALEY,EDWARD HENRY AN 134
509 W HUNTERS DR APT B
CARMEL IN 46032

DALLAS,FRED R U 134
1640 N RITTER ST
INDIANAPOLIS IN 46218

DALTON,NAOMI LUCILLA OS 214
2307 E 2ND ST APT 11
BLOOMINGTON IN 47401

DALTON,WILSON L FP 266
10 NORTHRIDGE PK P O BOX 70
SHELBYVILLE IN 46176

DALTON,WM WARREN OM 134
1736 WINCHESTER DR
INDIANAPOLIS IN 46227

DALY,JOS M — PD — I34
5969 SINGLETON ST
INDIANAPOLIS IN 46227

DALY,ROBERT STOKE — PUD — I34
1500 ALBANY STREET
SUITE 901
BEECH GROVE IN 46107

DALY,WALTER JOS — IM — I34
INDIANA UNIV MED CTR
INDIANAPOLIS IN 46202

DANCEL,MANUEL TOMAS — FP — 262
675 N GARDNER ST
SCOTTSBURG IN 47170

DANGANAN,MANUEL S — US — 306
NORTH MAIN ST
WINSLOW IN 47598

DANIEL,GERALD OWEN — R — I86
P O BOX 2413
ANDERSON IN 46011

DANIEL,JOHN CARLTON — OS — I34
5318 VIA ESTRADA
LAGUNA HILLS CA 92653

DANIEL,ROBT ALBERT — PD — I74
427 S LAKE ST
GARY IN 46403

DANNACHER,WM DENNIS — ABS — 302
400 ASH ST
WABASH IN 46992

DARBRO,DAVID ANTHONY — FP — I34
2124 E HANNA
INDIANAPOLIS IN 46227

DARLING,DOROTHY RUTH — AN — I74
2403 WEST 63RD ST
MERRILLVILLE IN 46410

DARNELL,JEFFREY CHAS — IM — I34
1001 WEST 10TH ST
REGENSTRIEF BLDG RM 607
INDIANAPOLIS IN 46202

DARROCA,WM CELIS — P — 314
865 SPRINGHOLLOW COURT
PLAINFIELD IN 47374

DARROW,GREGORY L — FP — 298
2000 EAST RACINE
JANESVILLE WI 53545

DAS,AMAL KUMAR — FP — 126
401 E REYNOLDS DR
KOKOMO IN 46901

DASCOLI,THOMAS C — FP — I34
652 N GIRLS SCHOOL ROAD # I35
INDIANAPOLIS IN 46224

DASHIELL,JAMES RALPH — ORS — I34
5508 EAST 16TH
INDIANAPOLIS IN 46218

DATZMAN,BASIL JOS — FP — I78
103 W 18TH ST
LA PORTE IN 46350

DATZMAN,RICHARD C — DR — 082
2722 ROSCOMMON DR
FORT WAYNE IN 46805

DAUGHERTY,FOREST DALE — FP — 014
2600 SANDCREST BLVD
COLUMBUS IN 47201

DAUGHERTY,FRED NEWTON — FP — I98
120 W PIKE ST
CRAWFORDSVILLE IN 47933

DAUGHERTY,H SAYLER — OTO — 082
102 MEDICAL CENTER BLDG
FORT WAYNE IN 46802

DAUGHERTY,WM LOUIS — FP — 282
BOX 275
HUTSONVILLE IL 62433

DAUS,MILTON J — FP — I86
720 GREENMEADOW DR
ANDERSON IN 46011

DAUSCHER,DEAN DONALD — FP — 082
5717 S ANTHONY BLVD
FORT WAYNE IN 46806

DAVE,VIJAY B — CD — I74
128 SHOREWOOD DR
VALPARAISO IN 46383

DAVID,DELFIN PARAS — EM — 126
4606 STRATFORD DR
KOKOMO IN 46901

DAVIDSON,CHAS O'DELL — OBG — I74
2200 GRANT ST
GARY IN 46404

DAVIDSON,DALE A — PS — I34
1053 HAMPTON CT
OVERLOOK
INDIANAPOLIS IN 46260

DAVIS,BENNIE LEON — U — I34
2615 N CAPITOL AVE
INDIANAPOLIS IN 46208

DAVIS,CARL MARLOW — FP — 230
R R I3
VALPARAISO IN 46383

DAVIS,CLAUDE E — GS — 278
402 B NORTH WAYNE STREET
ANGOLA IN 46703

DAVIS,EDWARD ANDREW — FP — 258
3014 ARDMORE TRAIL
SOUTH BEND IN 46628

DAVIS,EVERETT J — R — I34
4700 LUKE CT
INDIANAPOLIS IN 46227

DAVIS,GRAYSON B — FP — 286
2500 FERRY ST STE 150
LAFAYETTE IN 47904

DAVIS,HOWARD B — U — 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

DAVIS,JAMES ROBBINS P 134
1500 N RITTER AVENUE
INDIANAPOLIS IN 46219

DAVIS,JOHN ALEXANDER FP 266
FLAT ROCK IN 47234

DAVIS,JOS BENJ GS 098
131 N WASHINGTON ST
MARION IN 46952

DAVIS,KENNETH DEYLEN ORS 296
801 ST MARY'S DRIVE SUITE 509
P O BOX 5266
EVANSVILLE IN 47715

DAVIS,LARRY MARVIN P 134
1441 NORTH DELAWARE AVE
INDIANAPOLIS IN 46202

DAVIS,MARGARET MELVINA AN 134
2603 W 42ND ST
INDIANAPOLIS IN 46208

DAVIS,MARVIN ROBBINS FP 014
908 WASHINGTON ST
COLUMBUS IN 47201

DAVIS,SAM J ORS 134
115 N PENNSYLVANIA ST
INDIANAPOLIS IN 46204

DAVIS,THOS WM FP 046
P O BOX 270
WASHINGTON IN 47501

DAVIS,WM HENRY P 198
R R 2
CRAWFORDSVILLE IN 47933

DAWKINS,PHILLIP ROSS IM 066
RR #4 BOX 55-P
JASPER IN 47546

DAY,WM DURBIN CHAS FP 138
P O BOX 212
SEYMOUR IN 47274

DAYSON,LOUIE OTTO IM 162
218 SECURITY BANK BLDG
VINCENNES IN 47591

DE ARMOND,ALBERT M P 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

DE BOIS,ELON FP 174
2200 GRANT ST
GARY IN 46404

DE BROTA,JOHN AN 134
3266 N MERIDIAN
INDIANAPOLIS IN 46208

DE FRIES,JOHN J FP 070
P O BOX 26
NEW PARIS IN 46553

DE GRAZIA,EUGENE JOS GS 230
410 WASHINGTON
VALPARAISO IN 46383

DE INNOCENTES,LOUIS WM TS 030
1107 EAST BROADWAY
LOGANSPORT IN 46947

DE JESUS,JOSE R CD 190
120 W WASHINGTON
PLYMOUTH IN 46563

DE LA COTERA,FREDERICK G FP 174
7905 CALUMET AVE
MUNSTER IN 46321

DE LA FLOR,EDUARDO 296
3700 BELLEMEADE
EVANSVILLE IN 47715

DE LA PAZ,OSCAR GUEVARA U 174
500 W LINCOLN HWY
MERRILLVILLE IN 46410

DE LEON,EDILBERTO S AN 194
29 EAST MAIN ST
PERU IN 46970

DE MELO,LUIZ PEREIRA ORS 174
8500 BROADWAY
MERRILLVILLE IN 46410

DE NAUT,JAMES F FP 274
4 N HEATON ST
KNOX IN 46534

DE PALMA,BRUNO R 050
DEARBORN COUNTY HOSPITAL
LAWRENCEBURG IN 47025

DE PORTER,LOUIS ALPHONSE FP 174
7905 CALUMET AVE
MUNSTER IN 46321

DE ROSA,GUY PAUL ORS 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

DE STEFANO,MICHAEL JOS OBG 258
912 E LA SALLE AVE
SOUTH BEND IN 46617

DE WESTER,GERALD MAYSON FP 134
100 N MADISON AVE
GREENWOOD MEDICAL GROUP
GREENWOOD IN 46142

DEACON,WALTER E PH 134
5037 GUION RD
INDIANAPOLIS IN 46254

DEAL,ELEANOR H B FP 134
4917 W 15TH ST
SPEEDWAY IN 46224

DEAL,MICHAEL J P 134
739 MT RAINIER
INDIANAPOLIS IN 46217

DEAN,DONALD IRVIN OPH 254
4TH AND MAIN
RUSHVILLE IN 46173

DEAN,FREDERICK KENNETH R 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

DEARDORFF,DALE DENNIS FP 258
535 LINCOLN WAY W
MISHAWAKA IN 46544

DEARMIN,ROBT MASON OTO I34
6616 SPRING MILL RD
INDIANAPOLIS IN 46260

DECATUR,DAVID RICHARD FP I34
1303 N ARLINGTON AVE
INDIANAPOLIS IN 46219

DECKER,JEFFRY R D 082
3010 EAST STATE BLVD
FORT WAYNE IN 46805

DEEN,CHRISTOPHER OPH I74
6111 HARRISON
MERRILLVILLE IN 4641D

DEERY,MICHAEL FRANCIS FP I90
921 LAKE SHORE DR
CULVER IN 46511

DEEVER,JOHN WILKIN OBG I34
23 INCA LANE
HOT SPRINGS VILLAGE AR 71901

DEHNER,JOHN ROSS TR 314
212 SOUTH 22ND ST
RICHMOND IN 47374

DEITCH,ROBT DAVID OPH I34
1500 ALBANY ST SUITE 801
BEECH GROVE IN 46107

DEITSCH,HOWARD C FP 314
1020 N J ST
RICHMOND IN 47374

DEL ROSARIO,PEDRO G FP 090
121 W 8TH ST
ROCHESTER IN 46975

DELUMPA,RUSTICA Y CARLOS PD 230
802 LA PORTE
VALPARAISO IN 46383

DELUMPA,VINCENTE PALMA U 230
802 LA PORTE AVE
VALPARAISO IN 46383

DEMICHAEL,DANIEL L PTH I74
3210 WATLING ST
EAST CHICAGO IN 46312

DENHAM,ROBERT H ORS 258
109 S ST LOUIS BLVD
SOUTH BEND IN 46617

DENNIS,JAMES ALFRED PTH 162
R R #1 BOX 192
BRUCEVILLE IN 47516

DENNISON,KUMPOL GS I74
8695 CONN STREET25
SUITE D
MERRILLVILLE IN 46410

DENNY,DAVID M OPH 134
3326 MELBOURNE ROAD S DR
INDIANAPOLIS IN 46208

DENNY,FORREST L FP I34
3351 W 10TH ST
INDIANAPOLIS IN 46222

DENNY,JAMES WESLEY FP I34
25 N RITTER AVE
INDIANAPOLIS IN 46219

DENNY,MELVIN HARVEY AN 186
1207 VAN BUSKIRK RD
ANDERSON IN 46011

DENTINO,MARIELLEN NEP 296
722 KENMORE
EVANSVILLE IN 47715

DENTON,LARKIN D EM 126
128 S HOWARD ST
GREENTOWN IN 46936

DENZER,EDWARD K FP 296
540 SCENIC DRIVE
EVANSVILLE IN 47715

DENZER,WM OLIVER FP 296
2329 CHANDLER
EVANSVILLE IN 47714

DEOGRACIAS,FRANCISCO D GS I58
EAST 252
EDINBURG IN 46124

DEOGRACIAS,MONICA D AN I34
813 BOULDER RD
INDIANAPOLIS IN 46217

DEPPE,CHAS FREDERICK FP I58
301 E JEFFERSON ST
FRANKLIN IN 46131

DEPPE,JAMES TIMOTHY 298
SUITE 201
1024 S 6TH
TERRE HAUTE IN 47807

DERHAMMER,GEO LEWIS FP 286
R R 5 BOX 343
MONTICELLO IN 47960

DERSCH,DAVID MATHEWS OBG 062
2501 W JACKSON
MUNCIE IN 47303

DESAI,RAMESH FP 074
P O BOX 185
ROCKVILLE IN 47872

DESAI,SHREYAS A IM I74
3290 WEST GRANT
GARY IN 46408

DESCHAMPS,DOMENICO JOSE P I74
4655 BROADWAY
GARY IN 46409

DESTACHE,DONALD JAMES AN 296
540 AUBUBON DRIVE
EVANSVILLE IN 47715

DESTER,HERBERT EDGAR FP 010
424 W COMPROMISE ST
BERNE IN 46711

DETTLOFF,FREDERICK R FP 242
407 MELROSE AVE
GREENCASTLE IN 46135

DETTMER,ROBT WAYNE NEP 082
5105 WORTHMAN COURT
FORT WAYNE IN 46807

DEUPREE,WM DWIGHT PD 266
23 W HENDRICKS ST
SHELBYVILLE IN 46176

DEUR,JULIUS JAY IM 286
1011 COLUMBIA ST
LAFAYETTE IN 47901

DEVETSKI,ROBT LLOYD IM 258
AMER NAT'L BANK BLDG STE 1812
SOUTH BEND IN 46601

DEW,DANL CHING-YEE GS 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

DHANA,SRIKIETR PDC 174
6111 HARRISON
MERRILLVILLE IN 46410

DI ROBBIO,CARL C ORS 296
801 ST MARYS DRIVE
EVANSVILLE IN 47710

DIAL,FREDDIE P DIA 204
13301 LINCOLN DR
CEDAR LAKE IN 46303

DIAMOND,HOWARD MICHAEL U 174
7905 CALUMET AVE
MUNSTER IN 46321

DIAN,AUGUST JOS P 178
1517 STOGDILL ROAD
BLUFFTON IN 46714

DIAN,DONALD AUGUST P 318
303 SOUTH MAIN ST
BLUFFTON IN 46714

DICK,WM HENRY IM 134
1633 N CAPITOL AVE # 722
SUITE #722
INDIANAPOLIS IN 46202

DICKERSON,W MARTIN EM 322
1114 O'CONNOR BLVD
MONTICELLO IN 47960

DICKS,ROBT EVAN FP 134
8242 S MADISON AVENUE
INDIANAPOLIS IN 46227

DICKSON,CAROLYN H LUCAS FP 134
501 N WEST ST
INDIANAPOLIS IN 46202

DICKSON,DALE DONALD FP 054
R R 6 BOX 16
GREENSBURG IN 47240

DIECKMAN,HERBERT S A 296
3700 BELLMEADE
EVANSVILLE IN 47715

DIETZ,DAVID JACKSON FP 062
2810 ETHEL
MUNCIE IN 47304

DILL,CHAS WM FP 134
ST FRANCIS HOSPITAL
BEECH GROVE IN 46107

DILL,MYRON K IM 134
3120 N MERIDIAN ST
INDIANAPOLIS IN 46208

DILLMAN,CARL EDWARD FP 114
BEAVER AND OAK STS
CORYDON IN 47112

DILLON,GARY P D 082
2828 FAIRFIELD AVE
DUEMLING CLINIC
FORT WAYNE IN 46807

DILLON,JOHN F R 134
1604 N CAPITOL
INDIANAPOLIS IN 46202

DILTS,ROBT LOUIS FP 134
9041 BRIARCLIFT ROAD
INDIANAPOLIS IN 46256

DIMAILIG,GREGORIO H FP 174
1802 COLUMBUS
EAST CHICAGO IN 46312

DIMITROFF,LAMBRO FP 174
500 RIVER OAKS DR
CALUMET CITY IL 60409

DINGLE,PAUL ELLSWORTH OBS 314
127 MED ARTS BLDG
RICHMOND IN 47374

DINGLEY,ALBERT F ORS 258
109 S ST LOUIS BLVD
SOUTH BEND IN 46617

DININGER,WM STRAUGHN FP 246
303 S MAIN ST
WINCHESTER IN 47394

DINO,FLORIAN SOTTO GS 182
DUNN MEM DOCTORS PARK
BEDFORD IN 47421

DIOTELLEVI,GARY H FP 296
421 CHESTNUT STREET
EVANSVILLE IN 47713

DITTMER,JACK EDWARD FP 230
BOX 322
KOUTS IN 46347

DITTMER,THOS LYLE GS 230
839 N 350 E
VALPARAISO IN 46383

DIVCIC,BORIVOJ SRETEN P 174
701 WALL STREET
VALPARAISO IN 46383

DIXON,REX WM A 186
1931 BROWN
ANDERSON IN 46014

DIXON,WILLIAM L GS 162
14 S THIRD ST
VINCENNES IN 47591

DIZON,BELEN RODRIGUEZ AN 174
9138 MARIGOLD LN
MUNSTER IN 46321

DIZON,GUALBERTO REYES FP 174
800 MAC ARTHUR BLVD
MUNSTER IN 46321

DIZON,MIGUEL B NM 134
2001 WEST 86TH ST
ST VINCENT HOSPITAL
INDIANAPOLIS IN 46260

DIZON,RUSTICO HIPOLITO AN 050
DEARBORN CO HOSP
LAWRENCEBURG IN 47025

DJUROVIC,NADEZDA ASPARUH IM 174
401 NORTH BROAD ST
GRIFFITH IN 46319

DJUROVIC,ZARIJA FP 174
401 NORTH BROAD ST
GRIFFITH IN 46319

DOAN,JOHN ELDRIDGE FP 010
222 S 2D ST
DECATUR IN 46733

DODD,ROBERTS K GS 296
2042 LINCOLN AVE
EVANSVILLE IN 47714

DODD,ROBT DARR FP 258
2311 MIAMI ST
SOUTH BEND IN 46614

DODDS,WEMPLE R 198
414 EAST PIKE ST
CRAWFORDSVILLE IN 47933

DODT,KEVEN W FP 030
1201 MICHIGAN
LOGANSPORT IN 46947

DOERMANN,PAUL E GS 130
1751 N JEFFERSON ST
HUNTINGTON IN 46750

DOHERTY,RAYMOND JAMES FP 174
SUITE E
8695 CONN ST
MERRILLVILLE IN 46410

DOLAN,PATRICK ANTHONY R 134
9038 CHESTNUT CT
INDIANAPOLIS IN 46260

DOLEMBO,JOHN MICHAEL AN 134
9013 SWEET BAY CT
INDIANAPOLIS IN 46260

DOLES,TED SCOTT FP 062
613 N 10TH ST
MIDDLETOWN IN 47356

DOLEZAL,BERNARD J FP 258
425 WEST NORTH SHORE DR
SOUTH BEND IN 46616

DOLLENS,DAVID EDWIN IM 062
223 NORTH COLE STREET
MUNCIE IN 47303

DOMINGO,RICARDO C FP 054
DOMINGO BLDG
GREENSBURG IN 47240

DONAHUE,GEO RICHARD FP 286
250 SOUTH OCEON BLVD 7C
BOCA RATON FL 33432

DONALDSON,FRANK COOMBS OBG 186
2009 BROWN ST
ANDERSON IN 46014

DONALDSON,MILES WARREN FP 098
706 RIVER DR
MARION IN 46952

DONATO,ALBERT MARIO FP 134
2860 CHURCHMAN AVE
INDIANAPOLIS IN 46203

DONAUER,ROBERT M IM 230
PRUDENTIONAL PLAZA
FIRST FLOOR
MERRILLVILLE IN 46410

DONEFF,RONALD HAROLD O 174
5490 BROADWAY PLAZA
MERRILLVILLE IN 46410

DONESA,ANTONIO BRAGANZA NS 082
3030 LAKE AVE
FORT WAYNE IN 46805

DONNALLY,GEO ALLEN FP 146
R R 1
GENEVA IN 46740

DONNER,DONALD D OR 182
BEDFORD MEDICAL CENTER
BEDFORD IN 47421

DONOHUE,JOHN PATRICK U 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

DORAN,JORDAN HAL CO 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

DORMIRE,ROBT DARRELL R 082
2200 LAKE AVE STE 150
FORT WAYNE IN 46805

DORRANCE,THOS OLNEY PD 318
303 S MAIN ST
BLUFFTON IN 46714

DOSS,JEROME FAULKNER OBG 126
3415 S LAFOUNTAIN
KOKOMO IN 46901

DOSTER,STERLING EUGENE ORS 214
811 W SECOND ST
BLOOMINGTON IN 47401

DOUGHTY,SAML R — AN — 134
5435 EMERSON WAY NORTH
WINDRIDGE OFFICE BLDG NO 115
INDIANAPOLIS IN 46226

DOUGLAS,WM THOS — AN — 134
3266 N MERIDIAN STE 407
INDIANAPOLIS IN 46208

DOUMANIAN,HERATCH O — R — 174
540 TYLER ST
GARY IN 46402

DOVEY,EDWARD G — U — 070
513 OAKLAND AVE
ELKHART IN 46514

DOWD,JOS A — IM — 134
525 W HAMPTON
INDIANAPOLIS IN 46208

DOWELL,ANTHONY REED — PUD — 062
420 WASHINGTON ST
MUNCIE IN 47305

DOWNER,LUTHER H — FP — 296
2 WOODMERE LANE
EVANSVILLE IN 47715

DOWNS,KENNETH R — OM — 134
NORTH HARBOUR
598 COVENTRY WAY
NOBLESVILLE IN 46060

DOYLE,MARK G — EM — 122
1000 N 16TH ST
NEW CASTLE IN 47362

DRAGOMER,ANDREI S — DR — 174
1230 FRAN LIN PKWY
MUNSTER IN 46321

DRAGOO,JOHN ROBT — FP — 302
WABASH CLINIC
WABASH IN 46992

DRAKE,DALE WILFRED — AN — 296
ST MARYS HOSPITAL
EVANSVILLE IN 47715

DRAKE,ELLERY THEODORE — 202
1995 SUNRISE ST
MARTINSVILLE IN 46151

DRAKE,FRED DUANE — OTO — 298
1024 S 6TH ST
TERRE HAUTE IN 47807

DRAKE,JAMES RICHARD — FP — 186
2304 MERIDIAN ST
ANDERSON IN 46014

DRAKE,JOHN CALVIN — GS — 186
604 ANDERSON BANK BLDG
ANDERSON IN 46016

DRAKE,MARION CLIFFORD — FP — 186
1201 MAIN ST
ELWOOD IN 46036

DRAUS,JOHN MARTIN — GS — 034
201 EAST MARKET ST
MEDICAL CENTER BLDG
JEFFERSONVILLE IN 47130

DRENNEN,ROBT VORRIS E — CD — 186
2117 E 5TH ST
ANDERSON IN 46012

DREW,DANL CONNOR — FP — 066
JASPER MED ARTS BLDG
JASPER IN 47546

DRUMMOND,JAMES A — PTH — 258
BOX 757
MILAN IN 0 IN 47031

DRUMMY,WM WALLACE — IM — 298
3000 POPLAR ST
TERRE HAUTE IN 47803

DRYDEN,GALE EMERSON — AN — 134
5835 N TACOMA ST
INDIANAPOLIS IN 46220

DU BOIS,MICHAEL BRUCE — IM — 134
3130 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

DU BOIS,RAMON B — FP — 286
519 CALVERT LANE
LAFAYETTE IN 47905

DUBOIS,DON RAMON — PD — 134
7150 S MADISON ST
INDIANAPOLIS IN 46227

DUCANES,ARNOLD DELLOTA — FP — 054
RT 9 BOX 176
GREENSBURG IN 47240

DUGAN,JOHN RICKWOOD — FP — 134
6320 N FERGUSON
INDIANAPOLIS IN 46220

DUGAN,THOS PATRICK — FP — 014
1950 DOCTORS PARK DR
COLUMBUS IN 47201

DUGAN,WM MILLER — HEM — 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

DUKES,BETTY J DICKERSON — FP — 282
P O BOX 278
DUGGER IN 47848

DUKES,DAVID J — FP — 114
439 E CHESTNUT ST
CORYDON IN 47112

DUKES,JOS ELLSWORTH — FP — 282
P O BOX 278
DUGGER IN 47848

DUKES,MICHAEL JOS — OBG — 296
801 ST MARYS DR SUITE 400
EVANSVILLE IN 47715

DUKES,RUSSELL JAMES — TS — 214
619 WEST 1ST STREET
BLOOMINGTON IN 47401

DULIN,BASIL BURTON R 186
1120 MARLAND DR
ANDERSON IN 46011

DUMANIAN,ARA VAHAN CO 174
3680A 179TH ST
HAMMOND IN 46323

DUNCAN,JAMES E PTH 194
R R 1 BOX 294D
LA FONTAINE IN 46940

DUNCAN,RAYMOND E FP 182
2900 W 16TH ST
BEDFORD IN 47421

DUNCAN,STUART JACKSON FP 134
7835 E SOUTHPORT ROAD
INDIANAPOLIS IN 46259

DUNCAN,WM ARBAUGH DBG 118
204 MEADOW DR
DANVILLE IN 46122

DUNDEE,JOHN THOBURN R 182
ST FRANCIS HOSPITAL
MARYVILLE MO 64468

DUNFEE,THOS PATRICK NEP 258
720 EAST CEDAR SUITE 270
SOUTH BEND IN 46617

DUNKIN,RAMON SINCLAIR PUD 134
3266 N MERIDIAN ST
INDIANAPOLIS IN 46208

DUNLAP,DAVID L IM 258
423 JMS BLDG
SOUTH BEND IN 46624

DUNNING,PRESTON M OM 174
3210 WATLING ST
EAST CHICAGO IN 46312

DUNSTONE,HARRY CARTER P 082
105 THREE RIVERS EAST
FORT WAYNE IN 46802

DUPLER,LEE FORREST W IM 042
1201 OAK ST
FRANKFORT IN 46041

DUQUE,FAUSTO AN 034
328 MOCKINGBIRD HILL RD
LOUISVILLE KY 40207

DURBIN,JOHN PAUL GS 062
920 W MAIN ST
MUNCIE IN 47303

DURHAM,THOMAS E ORS 070
2200 CALIFORNIA AVE
ELKHART IN 46514

DUSARD,JOS CAVANAW FP 182
304 CITIZENS NATL BANK BLDG
BEDFORD IN 47421

DWYER,DANL JOS US 218
ROCKVILLE TOWN SQUARE
ROCKVILLE IN 47872

DWYER,DAVID JAMES IM 106
495 WESTFIELD ROAD
NOBLESVILLE IN 46060

DY,JAMES T FP 230
2530 SAND ST
PORTAGE IN 46368

DY,JULEY TEMBRINA FP 230
2530 SAND STREET
PORTAGE IN 46368

DYAR,EDWIN WM OPH 134
2020 WEST 86TH STREET
INDIANAPOLIS IN 46260

DYAR,ROBT WM OPH 134
2020 W 86TH ST
INDIANAPOLIS IN 46260

DYCUS,WALTER ARRINGTON FP 296
319 N ST JOSEPH AVE
EVANSVILLE IN 47712

DYE,CLOYD LEROY IM 122
1007 N 16TH ST
NEW CASTLE IN 47362

DYE,WM EDWARD FP 094
PROFESSIONAL BLDG
OAKLAND CITY IN 47560

DYER,GEO WALLACE FP 298
2710 WILSON DR
TERRE HAUTE IN 47807

DYER,JOHN KELLY NEP 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

DYKE,RICHARD WARREN HEM 134
542 W 83RD ST
INDIANAPOLIS IN 46260

DYKEN,MARK LEWIS N 134
#125 EMERSON HALL-DEPT NEUR
IUSM-1100 W MICH ST
INDIANAPOLIS IN 46223

DYKHUIZEN,THEODORE A U 042
608 E WASHINGTON ST
FRANKFORT IN 46041

EADES,R CHAS P 258
914 E JEFFERSON ST
SOUTH BEND IN 46617

EARL,MAX MARKLEY IM 126
502 S BERKLEY RD
KOKOMO IN 46901

EARP,EVANSON BYERS PH 134
3368 WASHINGTON BLVD
INDIANAPOLIS IN 46205

EASTER,JAMES NEIL FP 122
1912 BUNDY AVE
NEW CASTLE IN 47362

EASTLUNO,MARVIN EUGENE OBG 082
3124 EAST STATE BLVO
FORT WAYNE IN 46815

EATON,EDWIN RAY RM 134
COMMUNITY HOSP
INDIANAPOLIS IN 46219

EATON,LYMAN DALE IM 134
10119 HAMILTON HILLS LANE
INDIANAPOLIS IN 46250

EBBINGHOUSE,TOM H FP 314
13 PARKWAY LANE
RICHMOND IN 47374

EBERT,J WAYNE FP 134
1618 STOP II RO APT 7
INDIANAPOLIS IN 46227

EBERT,TERRY WAYNE O 174
509 RIDGE RD
MUNSTER IN 46321

EBERTH,EDWARD PALMER AN 134
7712 NOEL ROAD
INDIANAPOLIS IN 46278

ECHEVERRIA,R E ORS 070
2200 CALIFORNIA AVE
ELKHART IN 46514

ECHSNER,HERMAN J AN 014
DOCTORS PARK DR
COLUMBUS IN 47201

ECHT,CHAS ROBT OBG 134
3266 N MERIDIAN APT 404
INDIANAPOLIS IN 46208

ECKERT,RUSSELL ALOIS R 030
TWO CHASE PARK
LOGANSPORT IN 46947

EDLER,ROBERT WM OPH 182
1715 H STREET
BEDFORD IN 47421

EDMANDS,ROBT EMERSON CD 134
1213 NORTH ARLINGTON
INDIANAPOLIS IN 46219

EDWARDS,BERNARD ELMO AN 258
3355 TWYCKENHAM DR
SOUTH BEND IN 46614

EDWARDS,DAVID JEAN PH 134
1330 W MICH ST BRD OF HLTH
INDIANAPOLIS IN 46206

EDWARDS,HENRY GRADY U 298
518 S 7TH ST
TERRE HAUTE IN 47807

EDWARDS,JAMES LARKIN PO 178
900 I STREET
LA PORTE IN 46350

EDWARDS,JOHN ROBT GS 058
E 7TH ST P O BOX 30
MEDICAL ARTS BLDG
AUBURN IN 46706

EDWARDS,JOSHUA L PTH 134
IND UNIV MED CTR DEPT-PATH
INDIANAPOLIS IN 46202

EDWARDS,JUDITH ANN JOHNS CHP 134
8836 KIRKHAM RD
INDIANAPOLIS IN 46260

EDWARDS,RODNEY D OS 296
10400 HILLVIEW DRIVE
WADESVILLE IN 47638

EDWARDS,THOMAS A ORS 286
321 N 22ND ST
LAFAYETTE IN 47904

EDWARDS,WENDELL LEE AN 134
8836 KIRKHAM RD
INDIANAPOLIS IN 46260

EDWARDS,WILLIAM A FP 118
1655 HAWTHORNE DR
PLAINFIELD IN 46168

EFF,JACK S PD 296
MEAD JOHNSON RESEARCH DEPT
2404 PENNSYLVANIA
EVANSVILLE IN 47721

EGAN,SHERMAN L IM 258
423 JMS BLDG
SOUTH BEND IN 46601

EGBERT,HERBERT L GS 134
5317 E 16TH ST
INDIANAPOLIS IN 46218

EGGER,ROSS L FP 062
RTE 1 BOX 75
DALEVILLE IN 47334

EGGERS,HENRY WM OBG 174
110 RIDGE RD
MUNSTER IN 46321

EGGERS,RICHARD ROY FP 198
120 W PIKE ST
CRAWFORDSVILLE IN 47933

EGGERT,DAVID E GS 122
540-C SOUTH MAIN ST
NEW CASTLE IN 47362

EGLEN,DOUGLAS E HEM 062
2401 UNIVERSITY AVE
BALL HOSPITAL
MUNCIE IN 47303

EGNATZ,CHAS DYKE FP 174
U S 41 AND 30
SCHERERVILLE IN 46375

EGNATZ,NICHOLAS FP 174
30 DOUGLAS AVE
HAMMOND IN 46320

EHRLICH,CLARENCE EUGENE ND 134
1100 WEST MICHIGAN ST OBG DEPT
INDIANAPOLIS IN 46202

EICHER,PALMER O ORS 134
4401 WASHINGTON BLVD
INDIANAPOLIS IN 46205

EILER,PAUL AUSTIN FP 302
1104 N WAYNE ST
NORTH MANCHESTER IN 46962

EISAMAN,JACK LANGOHR CD 318
R R #8
COLUMBIA CITY IN 46725

EISENBERG,DAVID A FP 202
549 S JEFFERSON ST
MARTINSVILLE IN 46151

EL-ISSA,SA'D ISSA CO 298
3050 POPLAR ST
TERRE HAUTE IN 47803

ELDRIDGE,GAIL EDWARD FP 134
5239 NOB LANE
INDIANAPOLIS IN 46226

ELKINS,JAMES PAUL OBG 134
2045 LICK CREEK
INDIANAPOLIS IN 46203

ELLEMAN,JOHN HENRY FP 126
800 SOUTH BERKLEY
KOKOMO IN 46901

ELLER,ALVAN LA VERNE FP 026
203 N DIVISION ST
FLORA IN 46929

ELLETT,JOHN FP 242
BOX 126
COATESVILLE IN 46121

ELLIOTT,DANL ROBT R 134
7610 CANDLEWOOD LANE
INDIANAPOLIS IN 46250

ELLIOTT,PAUL W PTH 286
332 PARK LANE
LAFAYETTE IN 47906

ELLIOTT,STEVEN K FP 296
801 ST MARY'S DR
EVANSVILLE IN 47715

ELLIOTT,THOS A IM 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

ELLIOTT,WILLIAM JAMES R 134
5943 CAPE COD COURT
INDIANAPOLIS IN 46250

ELLIOTT,WM CROMARTIE CD 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

ELLIS,CHAS ROBT PTH 214
BLOOMINGTON HOSP DEPT PTH
BLOOMINGTON IN 47401

ELLIS,DAVID LEE AN 302
101 SHADY LANE
WABASH IN 46992

ELLIS,DAVIS W FP 254
600 E 11TH ST
RUSHVILLE IN 46173

ELLIS,FORREST D OPH 134
1100 WEST MICHIGAN ST
IND UNIV SCHOOL OF MEDICINE
INDIANAPOLIS IN 46202

ELLIS,GEO MELVIN FP 074
108 E 10TH ST
CONNERSVILLE IN 47331

ELLIS,LYMAN HALL FP 118
408 E 3RD ST
LIZTON IN 46149

ELLIS,ROBT KEITH ORS 070
2200 CALIFORNIA RD
ELKHART IN 46514

ELLIS,WM NICOL FP 134
1640 N RITTER
INDIANAPOLIS IN 46218

ELLISON,JON GREGORY US 066
HUNTINGBURG CLINIC
HUNTINGBURG IN 47542

ELMORE,MICHAEL F GE 134
5201 FIVE POINTS ROAD
INDIANAPOLIS IN 46239

ELSHOFF,DONALD VIRGIL IM 296
3700 BELLEMEADE AVE STE 104
EVANSVILLE IN 47715

ELSHOUT,CLEMENT H AN 178
409 FIRST NATL BK
LA PORTE IN 46350

ELSTON,LYNN WICKWIRE GS 082
7716 S HANNA ST
FORT WAYNE IN 46806

ELSTON,RALPH WICKWIRE GS 082
2305 RANDALL RD
FORT WAYNE IN 46804

ELWARD,CARL J R 302
WABASH PROFESSIONAL BLDG
WABASH IN 46992

ELY,CECIL W R 034
3305 ALLISON WAY
LOUISVILLE KY 40220

EMERSON,QUENTIN BRENT US 296
611 HARRIET ST
EVANSVILLE IN 47710

EMERT,FRANK LEROY OPH 162
501 SOUTH SIXTH ST
VINCENNES IN 47591

EMERY,CHARLES B ORS 214
711 W 2ND ST
BLOOMINGTON IN 47401

EMERY,CHAS BARTLETT FP 182
1611 11TH
BEDFORD IN 47421

EMHARDT,JOHN THILO OM 134
3305 BRILL RD
INDIANAPOLIS IN 46227

EMKES,BERNARD JOHN FP 134
6201 PARK AVE
INDIANAPOLIS IN 46220

ENDERLE,FRANK JOHN GS 298
1700 N 7TH ST
TERRE HAUTE IN 47807

ENDICOTT,WAYNE H FP 110
1330 SHERWOOD DRIVE
GREENFIELD IN 46140

ENGEL,EDGAR L OBG 296
326 S E 7TH ST
EVANSVILLE IN 47713

ENGEL,HOWARD ROBT IM 258
919 E JEFFERSON ST
SOUTH BEND IN 46622

ENGLISH,HUBERT MORTON FP 174
521 WEST 39TH PLACE
HOBART IN 46342

ENGLISH,JOHN PAUL IM 258
211 N EDDY
SOUTH BEND IN 46617

ENSEY,PHILIP L FP 298
29 LONGRIDGE RD
TERRE HAUTE IN 47802

ENTNER,CHAS LEROY FP 146
226 S MERIDIAN
DUNKIRK IN 47336

EPPS,JAMES HARMAN AN 082
2330 BEACON ST
FORT WAYNE IN 46805

ERDEL,MILTON WM OTO 042
2 E WHITE ST
FRANKFORT IN 46041

EREHART,MARK GEO OPH 130
MAPLE GROVE RD
HUNTINGTON IN 46750

ERICKSON,GUSTAF W PD 258
211 N EDDY AT COLFAX
SOUTH BEND IN 46617

ERICSON,HAROLD L FP 290
BOX 366
WINDFALL IN 46076

ERICSON,HOMER STANLEY FP 126
107 S DIXON RD
KOKOMO IN 46901

ERTAN,BEHIC M IM 174
2033 ROBINHOOD BLVD
SHERERVILLE IN 46375

ERWIN,WINFORD ROBT FP 178
900 I ST
LA PORTE IN 46350

ERXLEBEN,WALTER OSCAR IM 318
303 S MAIN ST
BLUFFTON IN 46714

ESKEW,KENNETH W FP 282
117 W WASHINGTON ST
SULLIVAN IN 47882

ESKEW,PHILIP NEWTON OBG 134
SUITE D
313 E CARMEL DR
CARMEL IN 46032

ESPINO,JOSE CANCIO GS 174
7550 HOHMAN
MUNSTER IN 46321

ESPY,THEODORE R FP 174
1901 BROADWAY
GARY IN 46407

ESTACIO,ROMEO Y FP 174
9523 WHITE OAK
MUNSTER IN 46321

ESTES,AMBROSE C GS 214
400 E 3RD ST
BLOOMINGTON IN 47401

EUGENIDES,TATIANA X S PD 174
8136 KENNEDY
HIGHLAND IN 46322

EVANS,DANL RICHARD OPH 230
2005 VALPARISO ST
VALPARAISO IN 46383

EVANS,DAVID LESLIE P 286
2424 FERRY ST
LAFAYETTE IN 47904

EVANS,FREDERICK H OTO 134
2140 N CAPITOL AVE
INDIANAPOLIS IN 46202

EVANS,FREDERICK J FP 218
226 SO MAIN ST
CLINTON IN 47842

EVANS,O THOMAS ORS 296
611 HARRIET ST
EVANSVILLE IN 47710

EVANS,PAUL VINCENT PTH 134
METHODIST HOSP
INDIANAPOLIS IN 46202

EVANS,RAEBURN MAURICE FP 134
8801 NORTH MERIDIAN ST NO 206
INDIANAPOLIS IN 46260

EVARD,ROBERT EDWARD FP 134
6320 FERGUSON STREET
INDIANAPOLIS IN 46220

EVENS,MARVIN AMOS AN 134
5435 EMERSON WAY NORTH #115
INDIANAPOLIS IN 46226

EVERETTS,DAVID R OBG 134
5470 E 16TH STREET
INDIANAPOLIS IN 46218

EVERS,PETER L FP 296
RR 8 BOX 131 BATAAN LANE
EVANSVILLE IN 47711

EVISTON,JOHN BOYD FP 130
34 E WASHINGTON ST
HUNTINGTON IN 46750

EWER,ROBT WAYNE IM 296
2830 LINCOLN AVE
P O BOX 2189
EVANSVILLE IN 47714

EWING,NATHANIEL D GS 162
RR 3
VINCENNES IN 47591

FADUL,ARMAND IM 174
8695 CONNECTICUT ST
MERRILLVILLE IN 46410

FAILEY,ROBT B IM 134
I U MEDICAL CENTER
INDIANAPOLIS IN 46202

FALCON,NIMITZ PRUDENCIO G AN 174
1027 52ND DRIVE APT 80-D
MERRILLVILLE IN 46410

FARAG,RAFIK S FOUAD GS 194
19 FAR VIEW
PERU IN 46970

FARAHMAND,FIROUZ PD 230
2674-P PORTAGE MALL
PORTAGE IN 46368

FARID,RAHIM GS 038
BOX 108
BRAZIL IN 47834

FARINAS,CIRILO T PTH 174
25 DOUGLAS
HAMMOND IN 46320

FARIS,JAMES VANNOY CD 134
1001 WEST 10TH STREET
KRANNERT INST OF CARDIOLOGY
INDIANAPOLIS IN 46202

FARIS,PHILIP MASON ORS 134
1500 ALBANY STREET
BEECH GROVE IN 46107

FARMER,CHAS ROBT FP 214
619 WEST FIRST STREET
BLOOMINGTON IN 47401

FARNER,JAMES E GE 258
130 W PARK LANE
SOUTH BEND IN 46601

FARQUHAR,JOHN S FP 296
401 SOUTHEAST SIXTH ST
EVANSVILLE IN 47713

FARR,JAMES CURRY IM 214
401 EAST 4TH ST
BLOOMINGTON IN 47401

FARRELL,JOHN JOS AN 110
120 W MC KENZIE
GREENFIELD IN 46140

FARRELL,JOS THOS FP 134
543 N AUDUBON RD
INDIANAPOLIS IN 46219

FARRIS,JOHN JOS EM 134
850 INDIAN TRAILS
CARMEL IN 46032

FATTU,JAMES M IM 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

FAULKNER,BARBARA ELLEN IM 074
MED-SCAN PROFESSIONAL BLDG
613-615 FRENCH ROAD
NEW HARTFORD NY 13413

FAULKNER,DONALD JOS FP 174
7905 CALUMET
MUNSTER IN 46321

FAUSSET,C BASIL NS 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

FAUST,HOWARD MACY FP 186
1508 N MADISON
ANDERSON IN 46012

FAUSTINO,CARLOS DAET AN 098
710 JEFFRAS AVE
MARION IN 46952

FAUSTINO,JOSEFINA F R OBG 098
710 JEFFRAS AVE
MARION IN 46952

FAW,MELVIN L CD 296
421 CHESTNUT ST
EVANSVILLE IN 47713

FAWCETT,ROBERT S 062
2401 UNIVERSITY AVE
BALL MEMORIAL HOSPITAL
MUNCIE IN 47303

FEAR,OLAN DE WITT IM 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

FECHTMAN,WM FREDERICK OTO 134
7980 HIGH DRIVE
INDIANAPOLIS IN 46240

FEDOR,THOS ANTHONY P 186
1525 WINDING WAY
ANDERSON IN 46011

FEENEY,MARTIN THOMAS OBG 134
4094 ROCKINGCHAIR RD
GREENWOOD IN 46142

FEFERMAN,MARTIN E NS 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

FELDMAN,HOWARD EUGENE OM 174
7905 CALUMET
MUNSTER IN 46321

FELDMAN,MAX FP 258
1921 MIAMI ST
SOUTH BEND IN 46613

FELDNER,RONALD PETER FP 174
110 RIDGE RD
MUNSTER IN 46321

FELGER,THOS ALLEN FP 082
5717 S ANTHONY BLVD
FORT WAYNE IN 46806

FELICIANO,ADORACION FP 298
916 SOUTH 5TH ST
TERRE HAUTE IN 47807

FELICIANO,ELPIDIO G AN 218
432 SOUTH 3RD ST
CLINTON IN 47842

FELICIANO,MACARIO G AN 298
916 S 5TH ST
TERRE HAUTE IN 47807

FELL,ROBT M FP 218
RR 1 BOX 243A
ROSEDALE IN 47874

FENNEMAN,ROBT J OPH 296
402 S E 7TH ST
EVANSVILLE IN 47713

FENOL,HONESTO KIMPO FP 306
NORTH MAIN ST
WINSLOW IN 47598

FENSTERMACHER,ROBT EDWIN FP 258
506 MICHIGAN ST
WALKERTON IN 46574

FERGUSON,ARTHUR N CD 082
1935 GOLDEN RAIN RD
WALNUT CREEK CA 94595

FERGUSON,DONALD H IM 186
2009 BROWN ST
ANDERSON IN 46014

FERGUSON,JAMES F OR 214
PO BOX 1149
BLOOMINGTON IN 47401

FERGUSON,JEFFREY HALE FP 134
3250 ARBUTUS DR
INDIANAPOLIS IN 46224

FERGUSON,PHILIP CHAS FP 302
1025 MANCHESTER AVE
WABASH IN 46992

FERGUSON,STEPHEN C HNS 296
350 W COLUMBIA SUITE 310
EVANSVILLE IN 47710

FERGUSON,WILLIAM B ORS 286
2525 SOUTH ST
LAFAYETTE IN 47904

FERLIC,FREDERICK JOHN ORS 258
720 E CEDAR SUITE 390
SOUTH BEND IN 46617

FERRARA,DONALD WM SJ 194
18 W 5TH ST
PERU IN 46970

FERRARA,JOS FRANCIS GS 158
111 S WATER ST P O BOX 6
FRANKLIN IN 46131

FERRARA,SAML J GS 194
18 W 5TH ST
PERU IN 46970

FERRARA,THOS ALBERT OBG 134
5508 EAST 16TH ST NO 25
MEDICAL ARTS BLDG NORTH
INDIANAPOLIS IN 46218

FERREE,H LANE P 134
1815 NORTH CAPITOL AVE NO 202
INDIANAPOLIS IN 46202

FERREE,MARY M CHP 134
1815 NORTH CAPITOL AVE NO 202
INDIANAPOLIS IN 46202

FERRELL,MARS BENTON FP 186
122 NORTH MAIN ST
FORTVILLE IN 46040

FERRER,JAVIER C OTO 174
509 RIDGE RD
MUNSTER IN 46321

FERRY,FRANCIS A OBG 134
1638 E RAYMOND
INDIANAPOLIS IN 46203

FERRY,JOHN LUMICE IM 174
1517 MAC ARTHUR BLVD
MUNSTER IN 46321

FESS,STEPHEN WAYNE GS 134
8402 HARCOURT RD #411
INDIANAPOLIS IN 46260

FESSLER,GORDON SOISTER FP 050
226 MAIN ST
RISING SUN IN 47040

FETROW,KENNETH O ORS 174
852 STATE LINE
P O BOX 1
CALUMET CITY IL 60409

FEUER,HENRY NS 134
1633 N CAPITOL AVE
SUITE 408
INDIANAPOLIS IN 46202

FIACABLE,JOS PAUL P 082
347 W BERRY ST
FORT WAYNE IN 46802

FIEDOR,JOHN P ORS 314
1250 CHESTER BLVD
RICHMOND IN 47374

FIELD,THOS EMERY FP 296
706 SOUTH 15TH
VINCENNES IN 47591

FIELDS,DON C GS 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

FIELDS,DONALD LEE PD 126
P O BOX 2705
KOKOMO IN 46901

FIELDS,MAX L FP 322
1307 U S 24 WEST
MONTICELLO IN 47960

FIELDS,RANDALL W R 122
NEW CASTLE RADIOLOGY, INC
1000 NORTH 16TH STREET
NEW CASTLE IN 47362

FILIPEK,WALTER JOS FP 258
311 ODD FELLOW BLDG
SOUTH BEND IN 46601

FILMER,ELEANOR H M JULIN FP 286
801 ELM DRIVE
WEST LAFAYETTE IN 47906

FINFROCK,JAMES D GS 070
515 S 2ND ST
ELKHART IN 46514

FINK,JAMES MAURICE IM 258
720 EAST CEDAR SUITE 260
SOUTH BEND IN 46617

FINNERAN,JOS CHAS GS 134
8402 HARCOURT RD APT 417
INDIANAPOLIS IN 46260

FIPP,AUGUST LORENZ FP 206
5518-6 OLD DOVER BLVD
FORT WAYNE IN 46815

FIRESTEIN,RAY IM 258
502 N IRONWOOD DR
SOUTH BEND IN 46615

FISCH,CHAS CD 134
I U MEDICAL CENTER
INDIANAPOLIS IN 46202

FISCH,JON 134
8330 NAAB RD SUITE 302
INDIANAPOLIS IN 46260

FISCHER,A ALAN FP 134
1100 WEST MICHIGAN ST
DEPT OF FAMILY MEDICINE
INDIANAPOLIS IN 46202

FISCHER,BURNELL AN 174
49 INDI-ILLI PKWY
HAMMOND IN 46324

FISCHER,CHAS KENNETH OPH 296
501 ST MARY'S DRIVE
SUITE 504
EVANSVILLE IN 47715

FISCHER,WARREN E R 186
ST JOHNS HOSP
ANDERSON IN 46011

FISCUS,CLIFFORD WM OPH 134
2020 WEST 86TH STREET
INDIANAPOLIS IN 46260

FISH,EDSON CLEMENT AN 258
19054 SUMMERS DR
SOUTH BEND IN 46637

FISHER,HENRY FP 098
1502 S WASHINGTON ST
MARION IN 46952

FISHER,JAN HAROLD AN 286
R R #1 207A
BATTLE GROUND IN 46792

FISHER,JOHN EDWARD 122
540 S MAINT ST
NEW CASTLE IN 47362

FISHER,PIERRE JAMES GS 098
500 WABASH AVE
109 PROFESSIONAL ARTS CTR
MARION IN 46952

FISHER,THOS FORREST OM 174
4102 HEMLOCK DRIVE
VALPARAISO IN 46383

FISHER,WALTER SCOTT CD 014
4715 WOODCREST DR
COLUMBUS IN 47201

FISHER,WILLIAM B IM 062
4013 W JACKSON ST
MUNCIE IN 47303

FISHER,WM PAUL P 134
ADULT PSYCHIATRY CLINIC
1100 WEST MICHIGAN ST
INDIANAPOLIS IN 46202

FITZGERALD,EDWARD BRICE CDS 134
8402 HARCOURT STE 411
INDIANAPOLIS IN 46260

FITZGERALD,JOS FRANCIS GE 134
825 SPRING MILL LANE
INDIANAPOLIS IN 46260

FITZGERALD,WM JOS FP 134
1118 E ST CLAIR ST
INDIANAPOLIS IN 46202

FITZKEE,WM ELWOOD FP 206
120 W MAIN ST
ALBION IN 46701

FITZPATRICK,HARRY W FP 186
1309 S ANDERSON ST
ELWOOD IN 46036

FITZPATRICK,JAMES S FP 146
603 WEST ARCH ST
P O BOX 1286
PORTLAND IN 47371

FITZPATRICK,WM J GS 174
110 RIDGE RD
MUNSTER IN 46321

FITZSIMMONS,SAML LEE U 296
900 SOUTH BOEKE RD
EVANSVILLE IN 47714

FLACK,RUSSELL ALLEN IM 286
432 CURSON AVE
LOS ANGELES CA 90036

FLAHERTY,RDBT ANTHONY R 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

FLAMION,PATRICK C 296
801 ST MARY'S DR
EVANSVILLE IN 47714

FLANAGAN,PAUL M DS 134
5842 N LA SALLE
INDIANAPOLIS IN 46220

FLANDERS,RDBT IM 134
3266 N MERIDIAN ST
INDIANAPOLIS IN 46208

FLANIGAN,M B AN 134
3305 RUTLEDGE DR
INDIANAPOLIS IN 46208

FLANNIGAN,HARLEY F FP 170
MED BLDG
LAGRANGE IN 46761

FLEISCHL,HERBERT P 134
P O BOX 192
SANIBEL FL 33957

FLORA,JDS O FP 134
5604 ROCKVILLE RD
INDIANAPOLIS IN 46224

FLORCRUZ,ARTURO ROXAS GS 174
2805 HIGHWAY AVE
HIGHLAND IN 46322

FLOYD,MALCOLM STAFFORD R 162
GOOD SAMARITAN HOSP
VINCENNES IN 47591

FOGLE,NORMAN LEE FP 134
8060 KNUE ROAD
SUITE 214
INDIANAPOLIS IN 46250

FOLEY,HANSEL ODELL FP 258
701 NORTH ST JOSEPH ST
SOUTH BEND IN 46601

FOLEY,PATRICK L FP 134
3500 LAFAYETTE ROAD
SUITE 203
INDIANAPOLIS IN 46222

FOLEY,PHILLIP DELANO FP 186
613 10TH ST
MIDDLETOWN IN 47356

FOLTZ,JACK LLOYD DBG 198
1407 DARLINGTON AVE
CRAWFORDSVILLE IN 47933

FONG,THEODORE C C P 150
316 BELLAIRE DR
MADISON IN 47250

FOO-CANTO,LOURDES LAI EM 306
1116 MILLIS AVE
WARRICK HOSPITAL
BOONVILLE IN 47601

FORCHETTI,JOHN ANTHONY CD 230
1610 COBBLESTONE CT
CHESTERTON IN 46304

FORREST,OTTO NORMAN DBG 258
912 E LA SALLE ST
SOUTH BEND IN 46617

FORSEE,NORMAN EDWARD FP 034
211 EAST MARKET ST
SUITE 106
JEFFERSONVILLE IN 47130

FORSTE,ROBERT LEE DRS 014
411 PLAZA DRIVE
SUITE H
COLUMBUS IN 47201

FORTNER,RAY EDWARD U 014
DOCTORS PARK BLDG 1
COLUMBUS IN 47201

FORTNER,WM ROBT R 078
3032 BROOKEHAVEN ROAD
NEW ALBANY IN 47150

FORTUNA,FRANK WM FP 134
1615 MAIN ST
BEECH GROVE IN 46107

FOSBRINK,EPHRAIM L FP 070
218 S HUNTINGTON
SYRACUSE IN 46567

FOSGATE,HAROLD L FP 134
4301 E 38TH ST
INDIANAPOLIS IN 46218

FOSSUM,ROGER M PTH 062
2705 WEST NORTH ST
MUNCIE IN 47303

FOSTER,JOHN ARTHUR PTH 082
P O BOX 268
FORT WAYNE IN 46801

FOSTER,LEE N CLP 134
RR 3 2020 136TH ST W
CARMEL IN 46032

FOSTER,LOWELL GEO P 134
3500 LAFAYETTE RD
INDIANAPOLIS IN 46222

FOSTER,RAY O OTO 134
8330 NORTH NAAB ROAD SUITE 203
INDIANAPOLIS IN 46260

FOSTER,RICHARD IM 122
THE CLINIC
NEW CASTLE IN 47362

FOUNTAINE,THOS JAY — FP — 182
1620 18TH ST
BEDFORD IN 47421

FOUTS,JOHN B — IM — 082
2828 FAIRFIELD AVE
DUEMLING CLINIC
FORT WAYNE IN 46807

FOWLER,RICHARD ROSS — FP — 214
104 N GRANT ST
BLOOMINGTON IN 47401

FOX,JACK MILLER — D — 174
7550 HOHMAN AVE
MUNSTER IN 46321

FOX,RICHARD FREDERICK — TR — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

FOY,THOS DANL — FP — 082
6642 ST JOE RD
FOY FAMILY PRACTICE INC
FORT WAYNE IN 46815

FRABLE,FRANK L — GS — 050
370 BIELBY RD
LAWRENCEBURG IN 47025

FRAHM,CHAS JOS — CD — 174
8012 KENNEDY AVE
HIGHLAND IN 46322

FRANADA,HECTOR — AN — 166
P O BOX 588
WARSAW IN 46580

FRANCE,LLOYD CAROL — GS — I90
I223 N CENTER ST
PLYMOUTH IN 46563

FRANCO,JAMES MICHAEL — NS — 296
SUITE 500
801 ST MARY'S DR
EVANSVILLE IN 47715

FRANK,HERBERT — IM — 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

FRANK,JOHN RAY — OPH — 230
23 LINCOLNWAY
VALPARAISO IN 46383

FRANK,LYALL LOUIS — FP — 258
224 W NAVARRE ST
SOUTH BEND IN 46601

FRANKE,GORDON RAYMOND — FP — 082
3010 E STATE BLVD
FORT WAYNE IN 46805

FRANKEL,GERALD JOS — U — 134
3266 N MERIDIAN STREET
SUITE # 704
INDIANAPOLIS IN 46208

FRANKEN,EDMUND A — PDR — 134
BOX 647
INDIANAPOLIS IN 46206

FRANKHOUSER,CHAS M A — PTH — 082
PO BOX 268
FORT WAYNE IN 46801

FRANKLIN,JOS EDWARD — OBG — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

FRANKLIN,WILLIAM L — ORS — 134
33 EAST 37TH STREET
INDIANAPOLIS IN 46205

FRANKOWSKI,CLEMENTINE E — PH — 174
1706 LA PORTE AVE
WHITING IN 46394

FRANZ,SHERMAN GAYLE — P — 014
2510 SANDCREST BLVD
COLUMBUS IN 47201

FRASH,DE VON WALTERS — FP — 258
1910 MIAMI ST
SOUTH BEND IN 46613

FRASURE,JAMES SCOTT — EM — 214
4285 WEST LYNWEST DRIVE
BLOOMINGTON IN 47401

FRAZIER,JOHN LEE — IM — 126
3421 S LAFOUNTAIN
KOKOMO IN 46901

FREDERICK,JOS A — IM — 030
I201 MICHIGAN AVENUE
LOGANSPORT IN 46947

FREDERICK,TERRY LEE — FP — 134
12518 WINDSOR DR
CARMEL IN 46032

FREE,MICHAEL WARREN — FP — 014
3200 SYCAMORE CT NO 2C
COLUMBUS IN 47201

FREED,CARL ADRIAN — OBG — 134
4334 SPRING WOOD TR
INDIANAPOLIS IN 46208

FREED,JOHN ELIAS — GS — 298
1024 S 6TH ST
TERRE HAUTE IN 47807

FREELAND,BILL E — OBG — 134
1500 ALBANY STREET
BEECH GROVE IN 46107

FREEMAN,MARK L — P — 286
WABASH VALLEY HOSPITAL
WEST LAFAYETTE IN 47906

FREEMAN,MAX E — FP — 134
89 1ST AVE SW
CARMEL IN 46032

FRENCH,RICHARD NOBLE — P — 134
8530 LAMIRA LANE
INDIANAPOLIS IN 46234

FRENCH,RICHARD STEPHENS — N — 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

FRETZ,RICHARD CARL — FP — 126
800 SOUTH BERKLEY
KOKOMO IN 46901

FREY,HARLEY H — AN — 286
1001 LIFE BLDG
LAFAYETTE IN 47901

FRIEDMAN,ISADORE E — OPH — 174
11 BEVERLY PLACE
MUNSTER IN 46321

FRIEDMAN,MORRIS S — ORS — 258
720 E CEDAR ST
SOUTH BEND IN 46617

FRIEDMAN,SHELDON JAMES — IM — 106
495 WESTFIELD ROAD
NOBLESVILLE IN 46060

FRIEND,GEO BERNARD — GS — 258
ST JOSEPH'S HOSP MED PAVILION
720 E CEDAR SUITE 380
SOUTH BEND IN 46617

FRIESEN,GENE WELDON — ID — 070
206 W WARREN ST
MIDDLEBURY IN 46540

FRIESKE,DAVID ALLEN — P — 174
701 WALL STREET
VALPARAISO IN 46383

FRITCH,JOHN MARTIN — OPH — 286
710 S 21ST ST
LAFAYETTE IN 47905

FRITH,LOUIS GORDON — FP — 258
51757 N HICKORY RD
GRANGER IN 46530

FRITZ,WALTER — FP — 274
1520 SOUTH HEATON ST
KNOX IN 46534

FRODERMAN,STANLEY EARL — GS — 038
1207 E NATIONAL
BRAZIL IN 47834

FROMHOLD,WILLIS A — IM — 134
510 WILLARD AVE
INDIANAPOLIS IN 46227

FROMM,GARY BRIAN — PUD — 258
422 SHERLAND BLDG
SOUTH BEND IN 46601

FROST,ROBT JOS — PTH — 178
1701 BUFFALO ST P O BOX 341
MICHIGAN CITY IN 46360

FRY,ROBT DE VAULT — GS — 134
1240 CONSOLIDATED BLDG
INDIANAPOLIS IN 46204

FUGELSO,ERLING SVERRE — IM — 214
207 HERITAGE RD
BLOOMINGTON IN 47401

FULLAM,RICHARD G — AN — 082
5800 FAIRFIELD STE 150
FORT WAYNE IN 46807

FULLER,ROBT GLEN — FP — 014
DOCTOR'S PARK BLDG 2
COLUMBUS IN 47201

FULTON,WM HALL — N — 134
7210 S MADISON AVE
INDIANAPOLIS IN 46227

FULTZ,ROY LEE — AN — 034
55 SYCAMORE ROAD
OAK PARK
JEFFERSONVILLE IN 47130

FUNDENBERGER,MARTIN — OPH — 134
2815 E 38TH ST
INDIANAPOLIS IN 46218

FURMAN,ROBT H — OS — 134
ELI LILLY
BOX 618
INDIANAPOLIS IN 46206

FURR,JACK DEAN — FP — 086
25 PARK AVENUE
HILLSBORO IN 47949

FURTADO,ROBT — PS — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

FUTTERKNECHT,JAMES OTTO — GS — 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

GABATO,MANUEL BARDOS — IM — 174
12110 GRANT ST
CROWN POINT IN 46307

GABLE,STEVEN ROBERT — NEP — 258
720 CEDAR STREET
SOUTH BEND IN 46617

GABOVITCH,EDWARD ROBT — RHU — 134
1935 N CAPITOL
INDIANAPOLIS IN 46202

GABOYA,RUBEN READ — IM — 126
P O BOX 577
BUNKER HILL IN 46914

GABRIEL,MAGDI — ORS — 258
320 W 4TH ST
MISHAWAKA IN 46544

GABRIELSEN,TED HOWARD — GS — 134
120 WEST MCKENZIE ROAD
GREENFIELD IN 46140

GADDY,NELSON DON — FP — 134
3500 LAFAYETTE ROAD
INDIANAPOLIS IN 46222

GAEBLER,JOHN WM — PD — 134
7150 MADISON AVE
INDIANAPOLIS IN 46227

GAHIMER,JOE EDWARD — IM — 186
215 W 19TH ST
ANDERSON IN 46014

GAILANI,SALMAN DIA — IM — 174
4321 FIR STREET
ST CATHERINE HOSPITAL
EAST CHICAGO IN 46312

GALANTE,ALBERT — OBG — 174
800 MAC ARTHUR BLVD
MUNSTER IN 46321

GALANTE,GLORIA — P — 174
625 RIDGE ROAD
MUNSTER IN 46321

GALBREATH,RICHARD E — OBG — 166
1804 EAST CENTER STREET
WARSAW IN 46580

GALINIS,ALGIMANTAS JOS — FP — 178
1225 E COOLSPRING
MICHIGAN CITY IN 46360

GALLAGHER,DANL F — AN — 082
5800 FAIRFIELD AVE 3 150
FORT WAYNE IN 46807

GALLANOSA,ARTURO G — AN — 186
2116 HEATHER RDAD
ANDERSON IN 46012

GALLIHER,MARJORIE JANE — FP — 062
1403 DUANE ROAD
MUNCIE IN 47304

GALLINATTI,JOHN JOS — FP — 230
2177 GREEN VALLEY DR LOFS
CROWN POINT IN 46307

GALUP,LUIS NEMESIO — PTH — 258
531 N MAIN ST
SOUTH BEND IN 46601

GAMBETTA,MIGUEL — CD — 174
8012 KENNEDY AVE
HIGHLAND IN 46322

GAMBILL,WM DUDLEY — IM — 134
118 W 18TH ST
INDIANAPOLIS IN 46202

GAMBLE,JAMES EDWARD — MNS — 296
RT 5 BOX 3A WORTMAN ROAD
EVANSVILLE IN 47711

GAMBOA,ELPIDIO L — END — 204
P O BOX 215
LAKE VILLAGE IN 46349

GAMMELL,LINDLEY LLOYD — AN — 014
2756 25TH ST
COLUMBUS IN 47201

GANADEN,EULOGIO V — P — 134
8740 STAGHORN RDAD
INDIANAPOLIS IN 46260

GANGADHAR,RUDRAPPA — HEM — 082
BOX 268
FORT WAYNE MEDICAL LAB
FORT WAYNE IN 46801

GANJI,NASSER — AN — 214
819 PLYMOUTH ROAD
PARKRIDGE EAST
BLOOMINGTON IN 47401

GANNON,ANTHONY PATRICK — FP — 158
100 WEST MADISON ST
FRANKLIN IN 46131

GANSER,RALPH VINCENT — OTO — 258
211 N EDDY
46617

GANSER,RICHARD A — EM — 258
1020 WILSON BLVD
MISHAWAKA IN 46544

GANZ,MAX — FP — 098
1251 KEM RD STE A
MARION IN 46952

GARBER,J NEILL — ORS — 134
5626 E 16TH ST
INDIANAPOLIS IN 46218

GARCIA,MANUEL GENETA — GS — 250
P O BOX 120
BATESVILLE IN 47006

GARCIA,TIERRY F — OTO — 134
1500 ALBANY ST
BEECH GROVE IN 46107

GARD,DANL A — OM — 134
1919 N CAPITOL ST
INDIANAPOLIS IN 46202

GARDE,RDDRIGO CARPIO — GS — 178
117 ARCH ST
NEW CARLISLE IN 46552

GARDINER,SPRAGUE HEMAN — OBG — 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

GARDINER,THOMAS K — IM — 062
4013 WEST JACKSON STREET
MUNCIE IN 47304

GARDNER,AUSTIN L — CDS — 134
8402 N HARCOURT RD
802
INDIANAPOLIS IN 46260

GARDNER,FREDERIC B — AN — 134
530 WILLOW SPRING RD
INDIANAPOLIS IN 46240

GARDNER,IAN ROSS — CDS — 258
919 EAST JEFFERSON BLVD
SOUTH BEND IN 46622

GARDNER,MELVIN DUANE — ABS — 178
801 WASHINGTON ST
MICHIGAN CITY IN 46360

GARDNER,NORMAN DAVID — R — 134
4925 BUTTONWOOD CRESCENT
INDIANAPOLIS IN 46208

GARDNER,RICHARD P — IM — 078
1919 STATE ST
PROF ARTS BLDG SUITE #24
NEW ALBANY IN 47150

GARDNER,RUSSELL ALLEN — OBG — 178
801 WASHINGTON ST
MICHIGAN CITY IN 46360

GARFIELD,MARTIN D — FP — 134
3705 N COLLEGE AVE
INDIANAPOLIS IN 46205

GARGETT,JAMES MICHAEL — FP — 098
706 RIVER RD
MARION IN 46952

GARLAND,EDGAR ALLEN — GS — 296
606 S WEINBACH AVE
EVANSVILLE IN 47714

GARNER,WM HOWARD — GS — 078
919 E SPRING ST
NEW ALBANY IN 47150

GARNER,WM HOWARD — GS — 078
919 E SPRING ST
NEW ALBANY IN 47150

GARNER,WM STANLEY — FP — 134
2704 E 62ND ST
INDIANAPOLIS IN 46220

GARRETT,ROBT AUSTIN — U — 134
I U MEDICAL CTR
INDIANAPOLIS IN 46202

GARRISON,JAMES L — FP — 110
11890 WELLAND ST
CUMBERLAND IN 46229

GARRISON,LEON JOHN — FP — 098
515 E MAIN ST
GAS CITY IN 46933

GARTNER,JOSE C — AN — 066
MEMORIAL HOSPITAL
JASPER IN 47546

GARTON,HARRY WASSON — US — 082
2528 E MC KELLIPS ROAD
MESA AZ 85203

GARVISH,JOHN FRANKLIN — R — 198
CULVER HOSPITAL
306 BINFORD ST
CRAWFORDSVILLE IN 47933

GASTINEAU,DAVID C — TR — 082
2200 LAKE AVE STE 150
FORT WAYNE IN 46805

GATES,GEO E — IM — 258
211 NORTH EDDY AT COLFAX
SOUTH BEND IN 46617

GATES,GEO GREGORY — PTH — 230
814 LA PORTE
VALPARAISO IN 46383

GATMAITAN,ALEJANDRO V — FP — 122
235 E CAREY
KNIGHTSTOWN IN 46148

GATTMAN,G BEACH — PD — 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

GATZIMOS,CHRISTOS D — PTH — 194
DUKES HOSPITAL
PERU IN 46970

GAUL,L EDWARD — D — 296
509 HULMAN BLDG
EVANSVILLE IN 47708

GAUNT,EVERETT WELKER — FP — 186
214 E JOHN ST
ALEXANDRIA IN 46001

GAURANO,LAURO M — IM — 134
234 E SOUTHERN
INDIANAPOLIS IN 46225

GAYLORD,THOMAS G — OBG — 202
1630 SOUTH OHIO ST
MARTINSVILLE IN 46151

GEBELE,GENE P — PTH — 054
LABORATORY DECATUR CO HOSP
GREENSBURG IN 47240

GECKLER,CHAS ELMER — PTH — 062
1007 W NORTH ST
MUNCIE IN 47303

GEHRING,GORDON GRANT — U — 162
615 DUBOIS ST
VINCENNES IN 47591

GEHRING,THOS ALBERT — FP — 174
6111 HARRISON ST
MERRILLVILLE IN 46410

GEIDER,ROY AUGUST — FP — 134
5816 PLEASANT RUN
INDIANAPOLIS IN 46219

GEIGER,DILLON D — OTO — 214
115 S LINCOLN ST
BLOOMINGTON IN 47401

GEISLER,HANS EMANUEL — OBG — 134
5470 E 16TH ST
INDIANAPOLIS IN 46218

GELLER,SAML — FP — 296
R R 8 BOX 143-A
EVANSVILLE IN 47711

GENNA,MARY MILLER — OS — 134
1448 CRESTLINE DR
SANTA BARBARA CA 93105

GENTILE,JONATHAN PAUL — GS — 082
5110 N CLINTON ST
FORT WAYNE IN 46825

GEORGE,CHAS LESTER — AN — 134
1121 E 80TH ST
INDIANAPOLIS IN 46240

GEORGE,JOHN LAWRENCE GS 134
8330 NAAB ROAD SUITE 301
INDIANAPOLIS IN 46260

GERDING,WM JOHN FP 082
R R # BOX 958
FREMONT IN 46734

GERGESHA,EDWARD ALEX PD 258
211 N EDDY ST
SOUTH BEND IN 46617

GERIG,ELDON LAVERN GS 258
303 S MAIN ST
MISHAWAKA IN 46544

GERLANC,MILAN D ORS 296
421 CHESTNUT ST
EVANSVILLE IN 47713

GERRISH,DONALD AIKMAN FP 298
5206 CLINTON RD
TERRE HAUTE IN 47805

GERTH,ROBT EDWARD R 134
METHODIST HOSP DEPT RADIOL
INDIANAPOLIS IN 46202

GETTLE,DAVID ROYCE EM 134
2030 MAIN STREET
BEECH GROVE IN 46107

GETTY,WM HAYES IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

GEVIRTZ,MILTON BERNARD GS 174
10141 E BAY HARBOR DR
MIAMI BEACH FL 33154

GIBBS,JOS WARREN FP 118
445 MILL ST
DANVILLE IN 46122

GIBSON,ALOIS E ORS 314
1250 CHESTER BLVD
RICHMOND IN 47374

GIBSON,BRUCE ANTHONY IM 062
205 GREENTREE DR
MUNCIE IN 47304

GIBSON,GRETA MAXINE OS 134
5744 BROADWAY TERR
INDIANAPOLIS IN 46220

GIBSON,MILTON EUGENE CD 258
919 E JEFFERSON BLVD
SUITE 309 JEFF MED ARTS BLDG
SOUTH BEND IN 46617

GIBSON,ROBT KEITH PD 062
806 W JACKSON ST
CHILDREN'S CLINIC INC
MUNCIE IN 47305

GICK,HERMAN HENRY FP 134
451 EASTERN AVE
INDIANAPOLIS IN 46201

GIESTING,JEROME RICHARD US 082
8112 QUINCY COURT
FORT WAYNE IN 46815

GIFFIN,CHAS SALEN OTO 082
102 MED CTR
FORT WAYNE IN 46802

GIFFORD,JOS DEAN PTH 302
WABASH COUNTY HOSP
WABASH IN 46992

GILBERT,ALAN RUSS D 082
2200 LAKE AVE NO 150 BLDG
FORT WAYNE IN 46805

GILBERT,ROBT G DR 222
15 CLIFTON HEIGHTS
CANNELTON IN 47520

GILKISON,WM MINOR FP 134
8242 S MADISON
INDIANAPOLIS IN 46227

GILL,HARBANS SINGH IM 050
605 WILSON CREEK ROAD
LAWRENCEBURG IN 47025

GILLES,PIERRE LOUIS OPH 174
2200 GRANT ST
GARY IN 46404

GILLESPIE,CHAS F OBG 134
3266 N MERIDAN STE 302
INDIANAPOLIS IN 46208

GILLESPIE,GARLAND RAY FP 138
210 N MAIN ST
BROWNSTOWN IN 47220

GILLESPIE,JACOB EARL FP 134
1246 CONSOLIDATED BLDG
INDIANAPOLIS IN 46204

GILLILAND,JOHN EDWARD OBG 158
R R 3 BOX 206 G
FRANKLIN IN 46131

GILLIM,PARVIN DOUGLAS OPH 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

GILLUM,EUGENE MORIN FP 146
522 W ARCH ST
PORTLAND IN 47371

GILMAN,MARCUS MANDLE OS 258
301 174TH ST APT 2217
NORTH MIAMI BEACH FL 33160

GILMORE,RICHARD R 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

GILMORE,ROBT WM PD 178
1715 BUFFALO ST
MICHIGAN CITY IN 46360

GILMORE,RUSSELL ADAMS FP 178
1715 BUFFALO ST
MICHIGAN CITY IN 46360

GINGERICK,CHAS MARVIN — FP — 318
BOX 208
LIBERTY CENTER IN 46766

GINSHERMAN,ABRAHAM B — FP — 078
1827 STATE ST
NEW ALBANY IN 47150

GIORGIO,DOUGLAS JOS — AN — 296
916 S BURKHARDT RD
EVANSVILLE IN 47715

GIRAGOS,HENRY G — TS — 174
800 MAC ARTHUR BLVD NO 25
MUNSTER IN 46321

GIRGIS,MEDHAT HELMY — IM — 182
2900 WEST 16TH ST
BEDFORD IN 47421

GIROD,ARTHUR HENRY — FP — 010
RR 6
DECATUR IN 46733

GIROD,DONALD ALFRED — PDC — 134
MED CENTER
INDIANAPOLIS IN 46202

GISH,HOWARD M — OS — 286
RR 2
DELPHI IN 46923

GITLIN,WM AARON — OM — 318
121 E MARKET ST
BLUFFTON IN 46714

GIVEN,GILBERT Z — PD — 174
COURT AND FRANCISCAN DRIVE
CROWN POINT IN 46307

GIZE,RAYMOND WALTER — DR — 082
2200 LAKE AVE SUITE 150
FORT WAYNE IN 46805

GLACKMAN,JOHN CLAY — FP — 270
MED CENTER BLDG
ROCKPORT IN 47635

GLANZMAN,NORMAN — FP — 134
313 E CARMEL DR #C
CARMEL IN 46032

GLASSER,KENNETH L — TS — 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

GLASSLEY,STEPHEN HERBERT — FP — 082
3010 E STATE
FORT WAYNE IN 46805

GLAZER,BARRY M — AN — 162
502 AMERICAN BANK BLDG
VINCENNES IN 47591

GLENDENING,RICHARD L — FP — 030
8 CHASE PARK
LOGANSPORT IN 46947

GLOCK,ALAN R — ORS — 314
920 SIM HODGIN PARKWAY
RICHMOND IN 47374

GLOCK,DOUGLAS E — ORS — 098
707 RIVER DR
MARION IN 46952

GLOCK,HUGH EDWIN — GS — 242
239 HILLSDALE
GREENCASTLE IN 46135

GLOCK,MAURICE E — IM — 082
1488 THE MANORS
AVON PARK FL 33825

GLOCK,STEVEN R — ORS — 082
5050 N CLINTON ST
FORT WAYNE IN 46825

GLOVER,JOHN LEE — GS — 134
6160 SUNSET LANE
INDIANAPOLIS IN 46208

GLOVER,WM J — GS — 174
6111 HARRISON ST
MERRILLVILLE IN 46410

GLUCKIN,JAMES ELLIS — OPH — 070
805 WEST MARION
ELKHART IN 46514

GODERSKY,GEO EDWIN — OBG — 258
912 E LA SALLE ST
SOUTH BEND IN 46617

GODERSKY,LOIS GARNET S — PTH — 258
531 MAIN ST
SOUTH BEND IN 46601

GODSEY,PHILLIP D — R — 082
2200 LAKE AVE
FORT WAYNE IN 46805

GOEBEL,C WM — PDA — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

GOEL,ARUN KUMAR — IM — 174
8500 BROADWAY
MERRILLVILLE IN 46410

GOEL,SARLA KANAL — PD — 174
8500 BROADWAY
MERRILLVILLE IN 46410

GOEL,VIJENDER NATH — 050
605 WILSON CREEK ROAD
LAWRENCEBURG IN 47025

GOHIL,JIVANLAL — P — 126
3500 LAFOUNTAIN ST
KOKOMO IN 46901

GOLD,MARVIN E — ORS — 230
2102 E EVANS AVE
VALPARAISO IN 46383

GOLDBERG,HAROLD BENJ — OS — 174
3656 GRANT ST
GARY IN 46408

GOLDBURG,BURT RICHARD — OTO — 098
711 RIVER ROAD
MARION IN 46952

GOLDEN,WM YOUNG FP 034
914 SPRINGDALE
JEFFERSONVILLE IN 47130

GOLDENBERG,DAVID BARRON R 134
1815 N CAPITOL
INDIANAPOLIS IN 46202

GOLDENBERG,MITCHELL E PS 174
7550 HOHMAN AVE
MUNSTER IN 46321

GOLDING,ROBT FISCHER AN 174
P O BOX 8246
MERRILLVILLE IN 46410

GOLDMAN,SAML FP 134
7967 BLUE JAY LANE APT D
INDIANAPOLIS IN 46260

GOLDSMITH,DAVID A IM 098
2711 RIVER RD
MARION IN 46952

GOLDSTEIN,RICHARD M GS 034
807 HIGH STREET
CHARLESTOWN IN 47111

GOLDSTONE,ADOLPH FP 174
7863 BROADWAY SUITE 114
MERRILLVILLE IN 46410

GOLDSTONE,JOS FP 174
10777 W SAMPLE RD
CORAL SPRINGS FL 33065

GOLDSTONE,SIDNEY RICHARD FP 174
535 W 35TH AVE
GARY IN 46408

GOLDYN,RICHARD ALAN ORS 266
120 WEST JACKSON ST
SHELBYVILLE IN 46176

GOLPER,MARVIN NORMAN R 126
1907 W SYCAMORE ST
KOKOMO IN 46901

GOMEZ,CESAR MORALES FP 174
1425 OAK PARK DR
MUNSTER IN 46321

GONZALES,SESINANDO A OBG 174
2513 HIGHWAY AVE
HIGHLAND IN 46322

GONZALEZ,ALFREDO B. GS 134
1500 ALBANY ST.
SUITE 1101
BEECH GROVE IN 46107

GOOD,RICHARD PETERSON OTO 126
1805 MONROE WEST
KOKOMO IN 46901

GOODE,ROBT JAMES FP 274
1520 S HEATON ST
KNOX IN 46534

GOODELL,CHAS LEEPER NS 062
308 WHITE RIBER BLVD
MUNCIE IN 47303

GOODMAN,ELI FP 034
807 HIGH ST
CHARLESTOWN IN 47111

GOODMAN,HUBERT THORMAN PH 298
4451 MASTERS DRIVE
COLUMBUS OH 43220

GOODMAN,JULIUS M NS 134
SUITE 408
1633 N CAPITOL AVE
INDIANAPOLIS IN 46202

GOODWIN,THOS GERALD FP 174
6111 HARRISON
MERRILLVILLE IN 46410

GOOTEE,FRANCIS HUGH FP 066
501 CLAY ST
JASPER IN 47546

GOOTEE,THOS H FP 066
501 CLAY ST
JASPER IN 47546

GORDON,JAMES DAVID D 230
VALPARAISO MEDICAL ARTS CENTER
2102 EAST EVANS
VALPARAISO IN 46383

GORDON,JOS LESTER FP 230
WHEELER IN 46393

GORDON,MARK D 174
7905 CALUMET AVE
MUNSTER IN 46321

GORDON,ROGER DREW FP 174
110 RIDGE ROAD
MUNSTER IN 46321

GORELIK,MARCOS PDA 174
110 RIDGE ROAD
MUNSTER IN 46321

GOREN,MARK 214
822 WEST FIRST STREET
BLOOMINGTON IN 47401

GORMLEY,JOS JAMES FP 134
2372 LAFAYETTE RD
INDIANAPOLIS IN 46222

GOSHORN,ROBYN KENT IM 158
P O BOX 476
FRANKLIN IN 46131

GOSMAN,JAMES HUBERT D 134
1815 N CAPITOL
INDIANAPOLIS IN 46202

GOSSARD,JOHN M ORS 286
2525 SOUTH ST
LAFAYETTE IN 47904

GOSSARD,MEREDITH B FP 290
308 N INDEPENDENCE ST
TIPTON IN 46072

GOSSMANN,G WILLIAM 034
1220 SPRING ST
JEFFERSONVILLE IN 47130

GOULD,JOHN C C — GYN — 082
2424 FAIRFIELD
FORT WAYNE IN 46807

GOULD,ROBERT E — PD — 122
1229 S MAIN ST
NEW CASTLE IN 47362

GOURIEUX,EDWARD DE VERRE — FP — 296
3700 BELLEMEADE SUITE 120
EVANSVILLE IN 47715

GRABER,ALVIN RAY — FP — 070
357 N NAPPANEE ST
NAPPANEE IN 46550

GRABER,BENJ ROBT — FP — 058
FAMILY DOCTOR CLINIC
WATERLOO IN 46793

GRABER,DONALD D — P — 070
109 CLARK HILL DRIVE
INMAN S C 29349

GRABER,MARTIN J — FP — 134
3910 DUNDEE DRIVE
INDIANAPOLIS, IN 46227

GRABER,RICHARD — FP — 210
RT 3
PAOLI IN 47454

GRABER,VIRGIL R — OBG — 070
1400 HUDSON ST
ELKHART IN 46514

GRABOW,EMIL FRANCIS — OPH — 174
7905 CALUMET AVE
MUNSTER IN 46321

GRAF,JEROME ALEXANDER — AN — 102
227 W MECHANIC ST
BLOOMFIELD IN 47424

GRAF,JOHN PAUL — AN — 258
53260 PLACID DR
SOUTH BEND IN 46637

GRAF,RUSSELL ENOCH — R — 318
1110 HIGHLAND PARK CIRCLE
BLUFFTON IN 46714

GRAFFIS,RICHARD FRED — GS — 134
1633 N CAPITOL
INDIANAPOLIS IN 46202

GRAHAM,GEO M — OM — 082
5860 MIDNIGHT PASS RD
VILLA NO 5
SARASOTA FL 33581

GRAHAM,JAMES CLARENCE — FP — 082
1834 S LAFAYETTE
FORT WAYNE IN 46803

GRAHAM,JOHN DOUGLAS — IM — 134
1500 ALBANY STREET NO 912
BEECH GROVE IN 46107

GRAHAM,NELSON VERE — OBG — 296
P O BOX 156
NEWBURGH IN 47630

GRAHAM,WM EUGENE — ORG — 134
2021 KINGSLEY DR
FORT WAYNE IN 4681

GRAINGER,JAMES LEWIS — R — 258
919 EAST JEFFERSON
SOUTH BEND IN 46622

GRANDA,ARMANDO BERNARDO — AN — 126
3100 SUSAN DRIVE
KOKOMO IN 46901

GRANT,BENJ FRANKLIN — FP — 174
1706 BROADWAY
GARY IN 46407

GRANT,M ARTHUR — AN — 098
BOX 1088
MARION IN 46952

GRANT,PHYLLIS ANN FENN — FP — 122
530 S MAIN
NEW CASTLE IN 47362

GRAVES,NOEL S — FP — 150
MADISON CLINIC
MADISON IN 47250

GRAVES,ORVILLE M — FP — 094
125 W WALNUT ST
PRINCETON IN 47670

GRAY,HOWARD R — D — 134
8801 N MERIDIAN ST SUITE 209
INDIANAPOLIS IN 46260

GRAY,KENNETH LEE — FP — 134
2714 MAC ARTHUR LANE
SPEEDWAY IN 46224

GRAY,LEON — IM — 202
260 EAST MORGAN ST
MARTINSVILLE IN 46151

GRAY,STUART ALLEN — OS — 062
2212 W MC GALLIARD
MUNCIE IN 47304

GRAY,WARREN LEE — U — 202
1410 E COLUMBUS ST
MARTINSVILLE IN 46151

GRAY,WAYNE LEE — CD — 062
4013 WEST JACKSON
MUNCIE IN 47304

GRAYSON,FRED EDWIN — U — 174
513 RIDGE RD
MUNSTER IN 46321

GRAYSON,MERRILL — OPH — 134
I U MEDICAL CENTER
INDIANAPOLIS IN 46202

GRAYSON,TED LINDSAY — GS — 134
2020 W 86TH ST SUITE 301
INDIANAPOLIS IN 46260

GREEN,FRANK HAROLD — FP — 254
134 E 2ND ST
RUSHVILLE IN 46173

GREEN,GED F — GS — 258
601 JMS BLDG
SOUTH BEND IN 46601

GREEN,GEO RICHARD — GS — 258
601 J M S BLDG
SOUTH BEND IN 46601

GREEN,JAN C — U — 258
513 NORTH MICHIGAN ST
SOUTH BEND IN 46601

GREEN,LEONARD JUDSON — FP — 230
2102 E EVANS
VALPARAISO IN 46383

GREEN,MORRIS — PD — 134
I U MEDICAL CENTER
INDIANAPOLIS IN 46202

GREEN,NORVAL E — U — 258
513 NORTH MICHIGAN ST
SOUTH BEND IN 46601

GREEN,OSCAR — OTD — 134
P O BOX 40506
INDIANAPOLIS IN 46240

GREEN,ROBT F — P — 082
614 W BERRY ST
FORT WAYNE IN 46802

GREEN,WM DOUGLAS — PD — 298
221 S SIXTH ST
TERRE HAUTE IN 47807

GREENBERG,BURTON HOWARD — CD — 174
8012 KENNEDY AVE
HIGHLAND IN 46322

GREENE,MORGAN E — PUD — 134
2014 WINCHESTER DR
INDIANAPOLIS IN 46227

GREENE,ROBT WILKINS — FP — 142
119 E GRACE ST
RENSSELAER IN 47978

GREENE,WM RAY — EM — 034
1220 MISSOURI AVE
JEFFERSONVILLE IN 47130

GREENLEE,JAMES ROBT — GYN — 070
236 SIMPSON
ELKHART IN 46514

GREENLEE,JOS ALAN — GS — 206
439 WATER ST
KENDALLVILLE IN 46755

GREENLEE,ROBT L — CHP — 082
909 E STATE BLVD
FORT WAYNE IN 46805

GREENWOOD,CHAS WALTER — IM — 014
380 PLAZA DRIVE SUITE D
COLUMBUS IN 47201

GREGG,EDWIN EUGENE — FP — 022
106 W MAIN ST
THORNTOWN IN 46071

GREGOLINE,EUGENE PAUL — OBG — 174
8127 MERRILLVILLE ROAD
MERRILLVILLE IN 46410

GREGORY,DAVID LEE — FP — 014
3530 DEERFIELD PLACE
COLUMBUS IN 47201

GREGORY,ROBT LEON — DIA — 134
5506 E 16TH
INDIANAPOLIS IN 46218

GREICO,VINCENT MICHAEL — FP — 070
236 SIMPSON ST
ELKHART IN 46514

GREISEN,JACK CHAS — FP — 174
2075 INDIANAPOLIS BLVD
WHITING IN 46394

GREIST,JOHN H — P — 134
3231 N MERIDIAN
INDIANAPOLIS IN 46208

GRIEF,ROBT STEELE — FP — 134
2302 E TROY
INDIANAPOLIS IN 46203

GRIEP,JOHN ARTHUR — PTH — 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

GRIES,RICHARD LAWRENCE — FP — 296
R R 1 BOX 338
HAUBSTADT IN 47639

GRIESER,GERHARD MATTHEW — NS — 296
801 ST MARYS DRIVE
EVANSVILLE IN 47715

GRIEST,WALTER DIXON — PTH — 082
3024 FAIRFIELD AVE
FORT WAYNE IN 46807

GRIFFIN,CHAS G — GS — 230
1101 GLENDALE
VALPARAISO IN 46383

GRIFFIN,JOS PATRICK — A — 230
419 JACKSON BLVD
CHESTERTON IN 46304

GRIFFIN,LESLIE WM — OM — 134
3203 W 57TH ST
INDIANAPOLIS IN 46208

GRIFFITH,HAROLD RILEY — R — 082
1913 FOREST PARK BLVD
FORT WAYNE IN 46805

GRIFFITH,JOEL HAROLD — P — 214
2801 NORTH WALNUT ST
BLOOMINGTON IN 47401

GRIFFITH,RICHARD S — OS — 134
2002 CUNNINGHAM RD
INDIANAPOLIS IN 46224

GRIFFITH,STEVEN H — FP — 296
611 HARRIET ST
EVANSVILLE IN 47710

GRILLO,DONALD CRS 258
1506 WILDFLOWER WAY
SOUTH BEND IN 46617

GRIMES,EVA M DR 134
6001 BUCKSKIN CIRCLE
INDIANAPOLIS IN 46250

GRIMES,HUBERT N PD 134
5516 E 21ST
INDIANAPOLIS IN 46218

GRIMM,WM CHAS HERBERT IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

GRIPE,RICHARD PUTNAM CD 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

GRISELL,TED LEWIS GS 134
5317 E 16TH ST
INDIANAPOLIS IN 46218

GRISELL,TED WOOD CDS 134
R R 1 BOX 812
CARMEL IN 46032

GROSFELD,JAY L PDS 134
1100 W MICHIGAN ST RILEY HOSP
INDIANAPOLIS IN 46202

GROSS,JOS OSCAR PD I74
7905 CALUMET AVE
MUNSTER IN 46321

GROSSMAN,CHAS BARRIE DR 134
1604 NORTH CAPITOL AVE
INDIANAPOLIS IN 46202

GROSSNICKLE,STEVEN P OPH I66
2269 DUBOIS ST
WARSAW IN 46580

GROSSO,WM GEO FP I74
4132 NORTHCOTE AVE
EAST CHICAGO IN 46312

GROSZ,HANUS JIRI P I34
IND UNIV MED CTR PSY RES
INDIANAPOLIS IN 46202

GROTHOUSE,CARL B ORS I26
402 S BERKLEY RD
KOKOMO IN 46901

GROVE,DEAN ALLEN GER I34
3411 BRIAR CIRCLE
CARMEL IN 46032

GRUBER,CHAS M OS I34
MARION CO GENERAL HOSPITAL
INDIANAPOLIS IN 46202

GRUSZYNSKI,THOS RALPH 258
515 N LAFAYETTE BLVD
SOUTH BEND IN 46601

GUCKIEN,JOS LAWRENCE OPH 296
611 HARRIET ST
EVANSVILLE IN 47710

GUEBARD,BRUCE ALLAN FP 082
FAMILY PRACTICE UNIT
3217 LAKE AVE
FORT WAYNE IN 46805

GUEVARA,FRENITA BERNAL FP 098
110 BERRY ST
UPLAND IN 46989

GUEVARA,TEODORO G IM 098
4506 S WESTERN AVE
MARION IN 46952

GUHA,DURGA DAS GS 218
225 ELM ST
CLINTON IN 47842

GUILD,J KENT FP 190
116 E WASHINGTON ST
PLYMOUTH IN 46563

GUIN,JERE DONALD D I26
804 S BERKLEY RD
KOKOMO IN 46901

GUINIGUNDO,NOLI C FP 074
R R 4
BROOKVILLE IN 47012

GUMBERT,JACK LEE GS 082
5010 RIVIERA CT
FORT WAYNE IN 46825

GUNDERSON,SHAUN DENNIS R 070
60301 C R 19
GOSHEN IN 46526

GUSTAFSON,MILTON HENRY F D 062
2606 W JACKSON ST
MUNCIE IN 47303

GUSTAITIS,JOHN WM DR I74
1148 BLUEBIRD DRIVE
MUNSTER IN 46321

GUTHRIE,JAMES ROBT IM 314
3112 S E PARKWAY
RICHMOND IN 47374

GUTHRIE,JAMES U GS 194
331 W 3RD ST
PERU IN 46970

GUTIERREZ,PETER EMANUEL FP I74
12110 GRANT
CROWN POINT IN 46307

GUTMANN,GORDON LIEBREICH GS 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

GUTTMAN,JOHN BECK FP 070
BOX 467
WAKARUSA IN 46573

GUTWEIN,GILBERT ORS 286
2525 SOUTH ST
LAFAYETTE IN 47904

GUZMAN,MARCELINO F FP 204
331 W BEAVER ST
MOROCCO IN 479[illegible]

HA,YOUNG JAE — AN — 258
604 N MICHIGAN ST
SOUTH BEND IN 46601

HAAS,CHAS F — D — 286
2500 FERRY
LAFAYETTE IN 47904

HAAS,RAY ALLAN — FP — 11D
1417 JASON ROAD
GREENFIELD IN 4614D

HABANSKY,ALAN J — ORS — 062
412 WHITE RIVER BLVD
MUNCIE IN 47303

HABBE,TIMOTHY ALAN — U — 214
901 WEST FIRST STREET
BLOOMINGTON IN 474D1

HABEGGER,ELMER D — GS — 134
8330 NAAB ROAD
INDIANAPOLIS IN 4626D

HABERMEL,JOHN FRANKLIN — CD — 078
PROF ARTS BLDG
STATE STREET
NEW ALBANY IN 4715D

HACHMEISTER,CHAS WM — FP — 296
611 HARRIET ST
EVANSVILLE IN 47710

HACKETT,JAMES K — OR — D50
600 WILSON CREEK RD
DEARBORN COUNTY HOSP
LAWRENCEBURG IN 47025

HACKETT,WALTER GEO — FP — D82
3610 BROOKLYN AVE
FORT WAYNE IN 468D9

HADDAD,ROLANDO IGNACIO — P — 034
1311 SPRING ST
JEFFERSONVILLE IN 4713D

HADDAWI,RAJIH Y — ORS — 214
811 W SECOND ST
BLOOMINGTON IN 47401

HADEY,JAMES H — OBG — 174
6111 HARRISON ST
MERRILLVILLE IN 4641D

HADIOIAN,HENRY ARAM — CDS — 174
3680 A 179TH ST
HAMMOND IN 46323

HADLEY,DAVID M — FP — 118
301 S EAST ST
PLAINFIELD IN 46168

HAGAN,MARION LUTHER — FP — 21D
307 MAIN ST
FRENCH LICK IN 47432

HAGENOW,CHAS FREDERICK — FP — 178
66 KESTON ELM DR
LA PORTE IN 46350

HAGERMAN,LAWRENCE — PD — 174
COURT AND FRANCISCAN DRIVE
CROWN POINT IN 463D7

HAGGARD,DAVID BENSON — FP — 118
301 S EAST ST
PLAINFIELD IN 46168

HAGGERTY,FRED EMMETT — FP — 242
6DO N ARLINGTON STE E
GREENCASTLE IN 46135

HAGUE,JOHN MAURICE — RHU — 134
8330 NAAB ROAD
INDIANAPOLIS IN 4626D

HAHN,JOHN JOONYONG — AN — 258
5TH & ROOSEVELT RD
DEPT OF ANES
HINES IL 6D141

HAHN,PAUL SANGHO — R — 174
7550 HOHMAN AVE
MUNSTER IN 46321

HAICK,EDWARD — R — 262
SCOTT CO MEMORIAL HOSP
SCOTTSBURG IN 47170

HAINES,DAVID W — FP — 166
2235 DUBOIS DR
WARSAW IN 46580

HAKAMI,MOHAMED TAGHI — OBG — 066
MEDICAL ARTS BUILDING
P O BOX 267
HUNTINGBURG IN 47542

HALABY,FOUAD ASSAD — R — 082
7DO BROADWAY
FORT WAYNE IN 468D2

HALBROOK,HAROLD G — GS — 134
1815 NORTH CAPITOL AVE
INDIANAPOLIS IN 46202

HALE,BRADFORD R — N — 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

HALEY,ALVIN JOHN — FP — 082
3217 LAKE AVE
FORT WAYNE IN 46805

HALEY,GEO MATSON — U — 258
220 SHERLAND BLDG
SOUTH BEND IN 46601

HALEY,PAUL EDWARD — GS — 258
301 LE BLVD DE LA PAIR 2901
SOUTH BEND IN 46615

HALFAST,RICHARD W — ORS — 126
402 S BERKLEY RD
KOKOMO IN 46901

HALL,BERNARD RICHARD — OBG — D30
1201 MICHIGAN AVE STE D
LOGANSPORT IN 46947

HALL,DONALD LURVE — FP — 226
7D1 NORTH 7TH ST
PETERSBURG IN 47567

HALL,JACK HUETT — CD — 134
METHODIST HOSPITAL
INDIANAPOLIS IN 46202

HALL,JAMES MALCOLM — OPH — 258
914 E JEFFERSON BLVD
SOUTH BEND IN 46617

HALL,ROBT SANDFORD — FP — 062
R R 9
MUNCIE IN 47302

HALL,THOS CHAS — FP — 230
621 BROADWAY
CHESTERTON IN 46304

HALL,WM RICHARD — AN — 082
WORTHMAN MALL NO 150
5800 FAIRFIELD AVE
FORT WAYNE IN 46807

HALLAL,ELI — FP — 078
2580 CHARLESTOWN ROAD
NEW ALBANY IN 47150

HALLECK,HAROLD JEROME — FP — 238
119 W MAIN ST
WINAMAC IN 46996

HALLER,RICHARD CARL — N — 082
3010 EAST STATE BLVD
FORT WAYNE IN 46805

HALLER,ROBT LEWIS — FP — 290
KEMPTON CLINIC
KEMPTON IN 46049

HALUM,RAMON GAYLON — U — 174
800 MAC ARTHUR BLVD SUITE 1
MUNSTER IN 46321

HAMAKER,RONALD CLAIR — HNS — 134
R R 2 BOX 201
9355 COOPER RD
ZIONSVILLE IN 46077

HAMANG,PETER MICHAEL — GS — 174
904 W RIDGE RD
HOBART IN 46342

HAMBURGER,RICHARD JAMES — NEP — 134
1100 W MICHIGAN ST
110 FESLER HALL IU MED CTR
INDIANAPOLIS IN 46223

HAMER,JOHN LELAND — PD — 170
4233 E STATE ST
FORT WAYNE IN 46815

HAMILTON,CHAS O — AN — 258
66288 MILLET ROAD
LAKEVILLE IN 46536

HAMILTON,EMORY O — AN — 082
5800 FAIRFIELD STE 150
FORT WAYNE IN 46807

HAMILTON,GEO MILTON — IM — 082
3124 E STATE BLVD
FORT WAYNE IN 46805

HAMILTON,JAMES ROBT — FP — 182
111 S 7TH STREET
MITCHELL IN 47446

HAMILTON,THOS G — FP — 326
BOX 508
COLUMBIA CITY IN 46725

HAMM,CHAS W — PD — 134
9211 GRINNELL ST.
INDIANAPOLIS IN 46268

HAMMER,JAY WM — R — 214
1323 E 1ST ST
BLOOMINGTON IN 47401

HAMMER,MICHAEL — OBG — 174
7018 INDIANAPOLIS BLVD
HAMMOND IN 46324

HAMMERSLEY,GEO K — GS — 042
1201 S OAK ST
FRANKFORT IN 46041

HAMMITT,KARLEEN BASCOM — P — 150
MADISON STATE HOSPITAL
MADISON IN 47250

HAMMOND,R CASE — U — 296
611 HARRIET ST APT 504
EVANSVILLE IN 47710

HAMMOND,STANLEY MEAD — P — 174
9337 CALUMET AVE
SUITE A
MUNSTER IN 46321

HAMPTON,JAMES NICHOLS — FP — 190
530 N MICHIGAN ST
ARGOS IN 46501

HAN,DANL — PTH — 174
414 SCARBOROUGH ROAD
VALPARAISO IN 46383

HANEY,LESLIE EARL — FP — 070
112 S 5TH ST
GOSHEN IN 46526

HANKIN,LAWRENCE G — U — 174
110 RIDGE ROAD
MUNSTER IN 46321

HANN,ELDON C — NS — 134
1815 N CAPITOL
INDIANAPOLIS IN 46202

HANNA,THOS ALLEN — FP — 134
1608 N LYNDHURST DR
SPEEDWAY IN 46224

HANNAH,JACK WM — AN — 070
1906 E JACKSON BLVD
ELKHART IN 46514

HANNAH,JOE MICHAEL — PD — 134
4115 OFFICE PLAZA BLVD
INDIANAPOLIS IN 46254

HANNEKEN,VINCENT JOHN — FP — 302
400 ASH ST
WABASH IN 46992

HANNEMANN,ROBT EARL PD 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

HANSELL,CHAS EARL FP 082
410 S LEWIS STREET
COLUMBUS WI 53925

HANSEN,J MICHAEL FP 250
MITCHELL ROAD
MARGARET MARY COMMUNITY HOSP
BATESVILLE IN 47006

HANSEN,NIKOLAS FORBES FP 230
2102 EAST EVANS AVE
VALPARAISO MEDICAL ARTS CENTER
VALPARAISO IN 46383

HANSON,MARTIN F FP 186
100 N 1ST ST
ELWOOD IN 46036

HARCOURT,ROBT SHAW HS 134
1915 N CAPITOL AVE
INDIANAPOLIS IN 46202

HARDEN,MURRAY E OBG 286
401 SHARON RD
WEST LAFAYETTE IN 47906

HARDESTY,WILLIAM P IM 296
515 READ ST
EVANSVILLE IN 47710

HARDIN,STEPHEN LEE FP 202
171 EAST WASHINGTON ST
MARTINSVILLE IN 46151

HARDIN,WAYNE EMERSON FP 318
102 METTS ST
OSSIAN IN 46777

HARDING,JOHN SCOTT DR 258
3533 SPRINGBROOK DR
SOUTH BEND IN 46614

HARDING,M RICHARD OPH 134
8801 NORTH MERIDIAN ST NO 107
INDIANAPOLIS IN 46260

HARDMAN,DONALD RAY DR 134
8711 GREEN BRAES S DR
INDIANAPOLIS IN 46234

HARE,DANL M U 296
5029 LINCOLN AVE
EVANSVILLE IN 47715

HARE,FRANCIS WILLIAMS JR IM 150
722 W MAIN ST
MADISON IN 47250

HARE,LAURA IM 134
87 W 43RD ST
INDIANAPOLIS IN 46208

HARGER,ROBT WM OPH 134
115 NORTH PENN
INDIANAPOLIS IN 46204

HARGETT,HERBERT P OPH 034
P O BOX 696
JEFFERSONVILLE IN 47130

HARGETT,ISAAC REYNOLDS PD 296
421 CHESTNUT ST
EVANSVILLE IN 47713

HARGROVE,TERRY KENT IM 030
1201 MICHIGAN AVENUE
LOGANSPORT IN 46947

HARLESS,O FRED EM 082
104 SUMMIT
MONROEVILLE IN 46773

HARLOWE,STUART E U 078
15 TRIMINGHAM RD
NEW ALBANY IN 47150

HARMAN,ROBERT E PTH 258
531 NORTH MAIN ST
SOUTH BEND IN 46601

HARMON,CARL JOS FP 314
311 MED ARTS BLDG
RICHMOND IN 47374

HARMON,THOS MAITLAND R 296
R R 8 BROWNING RD
EVANSVILLE IN 47711

HARNDEN,HURLBUT L GS 150
426 E MAIN ST
MADISON IN 47250

HARNED,BEN R GS 296
421 CHESTNUT ST
EVANSVILLE IN 47713

HARPER,ADA PATRICIA R 134
1100 WEST MICHIGAN STREET
INDIANAPOLIS IN 46202

HARPER,JAMES WINSTON FP 174
2303 CALUMET DR
EAST CHICAGO IN 46312

HARRIS,C GLENN P 258
403 E MADISON ST
SOUTH BEND IN 46617

HARRIS,CARL BENJ OPH 134
612 ALWYNE RD
CARMEL IN 46032

HARRIS,GEO F FP 150
445 CLIFTY DRIVE
MADISON IN 47250

HARRIS,JAMES JAY FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

HARRIS,LEE A OBG 082
717 BROADWAY
FORT WAYNE IN 46802

HARRIS,NEIL REVERE FP 070
307 S 7TH ST
GOSHEN IN 46526

HARRIS,PAUL NOEL PTH 134
4114 E 65TH ST
INDIANAPOLIS IN 46220

HARRIS,ROBT LEE FP 296
SUITE 305 ST MARY MED BLDG
801 ST MARYS DR
EVANSVILLE IN 47715

HARRIS,WM DUANE AN 296
27 CAMDEN COURT
EVANSVILLE IN 47715

HARSHMAN,LOUIS POTTER P 082
1555 N MAIN ST
FRANKFORT IN 46041

HART,ROBT BRUCE FP 014
915 WASHINGTON ST
COLUMBUS IN 47201

HARTER,ELI BLAIR AM 286
918 KING ST
LAFAYETTE IN 47905

HARTLEY,CLARENCE A FP 296
221 CHESTNUT ST
EVANSVILLE IN 47713

HARTMAN,CLAUDE EDWARD OBG 070
515 NORTH RIVERSIDE DR
ELKHART IN 46514

HARTMAN,JOHN J ABS 278
909 W MAUMEE ST
ANGOLA IN 46703

HARTSOUGH,RALPH I EM 258
24078 STANTON RD
NORTH LIBERTY IN 46554

HARTZ,F MINTON US 296
7321 TAYLOR
EVANSVILLE IN 47715

HARVEY,PENNETT BROWN PTH 286
2908 BEVERLY LANE
LAFAYETTE IN 47904

HARVEY,DAVID M ORS 174
716 SEBERGER DR
MUNSTER IN 46321

HARVEY,HARRY C OS 082
METHODIST HOME
FRANKLIN IN 46131

HARVEY,JOHN CHRISTIE FP 058
DEKALB MED ARTS CENTER
P O BOX 663
AUBURN IN 46706

HARVEY,RALPH JOHNS GPM 022
95 S 3RD ST
ZIONSVILLE IN 46077

HARVEY,VERNE K PH 134
3601 WEST 69TH ST
INDIANAPOLIS IN 46268

HARVEY,VERNE K GPM 022
RR 2 BOX 292
ZIONSVILLE IN 46077

HASEWINKEL,CARROLL WEBER AN 134
R D 2 BOX 354
CARMEL IN 46032

HASEWINKLE,AUGUST M IM 082
2828 E STATE BLVD
FORT WAYNE IN 46805

HASH,JOHN SHORE GS 106
1731 STONEY CREEK
NOBLESVILLE IN 46060

HASHEMI,HOSSEIN GS 166
602 S BUFFALO
WARSAW IN 46580

HASLEM,JOHN ROBT GS 298
221 S 6TH ST
TERRE HAUTE IN 47807

HASS,CAROLINE E HALL FP 286
316 N SALISBURY
WEST LAFAYETTE IN 47906

HASS,THOS W OBG 286
316 N SALISBURY
WEST LAFAYETTE IN 47906

HASSEL,WALTER BETHEL OBG 296
3712 HERNDON DR
EVANSVILLE IN 47711

HASTINGS,WARREN C NS 082
2120 CAREW ST
FORT WAYNE IN 46805

HASWELL,JOHN NOBLE OBG 162
607 OU BUIS ST
VINCENNES IN 47591

HATCHER,CHAS MONTE FP 014
2127 DOCTORS PARK DR
COLUMBUS IN 47201

HATFIELD,NICHOLAS W OS 134
5851 E 54TH PL
INDIANAPOLIS IN 46226

HATHAWAY,CLAYTON B FP 058
1005 NICHOLAS ST
AUBURN IN 46706

HATHAWAY,WM HENRY FP 058
1005 NICHOLES ST
AUBURN IN 46706

HATHWAY,STEPHEN DALLAS PTH 258
15432 CARMAGE LN
MISHAWAKA IN 46544

HATTENDORF,A PAUL PH 082
4041 OLD MILL ROAD
FORT WAYNE IN 46807

HAUERSPERGER,ALFRED D OPH 014
2756 25TH ST
COLUMBUS IN 47201

HAUGHN,JAMES FP 302
645 N SPRING ST
WABASH IN 46992

HAUGSETH,ELLSWORTH K ORS 258
820 N IRONWOOD
SOUTH BEND IN 46615

HAVENS,A LYLE FP 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

HAVENS,RUSSELL E AN 082
3721 INWOOD DR
FORT WAYNE IN 46815

HAVENS,THOS R P 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

HAWES,MARVIN E CD 014
R R 1 BOX 59
HOPE IN 47246

HAWK,EDGAR A AN 134
7328 HUNTINGTON RD
INDIANAPOLIS IN 46240

HAWK,JAMES ALLEN FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

HAWK,JAMES HUBER OBG 134
26 WEST LAVEROCK ROAD
INDIANAPOLIS IN 46208

HAWKINS,RICHARD DALE PD 182
EDGEWOOD CLINIC
BEDFORD IN 47421

HAWTHORNE,JAMES JOHN IM 134
4546 CROOKED CREEK RIDGE RD
INDIANAPOLIS IN 46208

HAY,GENE R IM 178
1225 E COOLSPRING AVE
MICHIGAN CITY IN 46360

HAYES,THEODORE R U 062
520 W MAIN ST
MUNCIE IN 47305

HAYES,THOS P TR 296
DEACONESS HOSP
EVANSVILLE IN 47710

HAYHURST,THOS ELDON PUD 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

HAYMOND,GEO M GS 166
2251 DUBOIS DR
WARSAW IN 46580

HAYMOND,JOS LAYTON PTH 134
1212 WILLOW WAY
NOBLESVILLE, IN 46060

HAYNES,JOHN THOS A 134
1815 N CAPITOL
INDIANAPOLIS IN 46202

HAYWOOD,JOHN GERRY FP 106
110 LAKEVIEW DR
NOBLESVILLE IN 46060

HAZELRIGG,DONALD EDWIN D 296
421 CHESTNUT ST
EVANSVILLE IN 47713

HEALEY,ROBT J GE 134
5559 WASHINGTON BLVD
INDIANAPOLIS IN 46220

HEALY,CORNELIUS EDWARD PD 296
421 CHESTNUT ST
EVANSVILLE IN 47713

HEATON,ELTON PTH 150
1950 VALLE VISTA CT
MADISON IN 47250

HEAVRIN,JOHN SLOAN OBG 202
1630 S OHIO ST
MARTINSVILLE IN 46151

HECK,LARRY LEE NM 134
2103 WHITEWOOD COURT
INDIANAPOLIS IN 46260

HECKAMAN,EDWARD LENTZ OS 314
RICHMOND STATE HOSP
RICHMOND IN 47374

HECKMAN,JAMES D N 082
DUEMLING CLINIC
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

HEDGCOCK,ROBT ANDREW FP 042
259 E CLINTON ST
FRANKFORT IN 46041

HEDRICK,JAMES T FP 174
2200 GRANT ST
GARY IN 46404

HEDRICK,PHILIP WM PD 134
1221 E 86TH ST
INDIANAPOLIS IN 46240

HEGEMAN,THEODORE FAYNE IM 134
1633 N CAPITOL AVE # 722
INDIANAPOLIS IN 46202

HEHEMANN,WM VINCENT FP 174
7905 CALUMET AVE
MUNSTER IN 46321

HEID,GEO J FOP 286
2500 FERRY ST
LAFAYETTE IN 47904

HEIDEMAN,HARRY DAVID R 034
1220 MISSOURI AVE
JEFFERSONVILLE IN 47130

HEILMAN,WM CLYDE FP 122
1007 NORTH 16TH ST
NEW CASTLE IN 47362

HEIMBURGER,IRVIN LE ROY TS 296
611 HARRIET ST STE 501
EVANSVILLE IN 47710

HEINLEIN,CARL LORISTON FP 118
155 WEST MARION ST
DANVILLE IN 46122

HEINRICH,JAMES 296
3700 BELLEMEADE
EVANSVILLE IN 47715

HEINRICH,WESTON A — GS — 296
715 FIRST AVE SUITE 21
EVANSVILLE IN 47710

HEINSEN,CHAS EDWARD — FP — 238
613 TIPPECANOE DR
WINAMAC IN 46996

HEISER,ERVIN WM — OBG — D7D
1400 HUDSON ST
ELKHART IN 46514

HELD,GEO ARTHUR — FP — 066
51 PINE DR-CHRISTMAS LAKE VILL
SANTA CLAUS IN 47579

HELLER,EARL JOS — ORS — 258
109 SOUTH ST LOUIS BLVD
SOUTH BEND IN 46617

HELMEN,CHAS H — R — 134
5269 ROLAND DR
INDIANAPOLIS IN 46208

HELMER,JOHN FRANCIS — GS — 258
2116 AMERICAN NATL BANK BLDG
SOUTH BEND IN 46601

HELMS,CHAS EDWARD — GS — 174
110 RIDGE RD
MUNSTER IN 46321

HELVESTON,EUGENE M — OPH — 134
INDIANA UNIV MED CENTER
INDIANAPOLIS IN 46202

HELVIE,JANICE L — GPM — D14
DOCTORS PARK NO 2
COLUMBUS IN 47201

HEMPHILL,ROGER ANDREW — IM — 098
7607A SOMERSET BAY
INDIANAPOLIS IN 46240

HENDERSHOT,EUGENE L — R — 296
401 S E 6TH ST
EVANSVILLE IN 47713

HENDERSON,LAWRENCE W — P — 162
520 SOUTH 7TH ST
VINCENNES IN 47591

HENDERSON,NORMAN CHAS — OTO — 178
P O BOX 586
MICHIGAN CITY IN 46360

HENDERSON,RAMON ADAIR — PD — 062
806 W JACKSON ST
CHILDREN'S CLINIC INC
MUNCIE IN 47305

HENDERSON,ROSCOE C — FP — 134
101 E 34TH ST
INDIANAPOLIS IN 46205

HENDERSON,TERRY LYNN — FP — 134
8330 NAAB RD
INDIANAPOLIS IN 46260

HENDRICKS,FRED ARTHUR — FP — 134
6917 N KEYSTONE
INDIANAPOLIS IN 46220

HENDRIE,HUGH CURTIS — P — 134
7960 CONARROE ROAD
INDIANAPOLIS IN 46278

HENDRIX,CHAS E — IM — 162
PO BOX 686
VINCENNES IN 47591

HENN,RAY ANTHONY — FP — 110
137 W MICHIGAN ST
GREENFIELD IN 46140

HENNESSEE,SAML DENNIS — FP — 134
11627 FOREST DR
CARMEL IN 46032

HENRICH,CARTER F — IM — 214
419 WEST FIRST ST
BLOOMINGTON IN 47401

HENRY,ALVIN L — OPH — 014
P O BOX 264
COLUMBUS IN 47201

HENRY,HOWARD JENNINGS — GS — 274
P O BOX DRAWER
107 MAIN ST
KNOX IN 46534

HENRY,RUSSELL SELDON — PUD — 134
4715 RYDAL COURT
INDIANAPOLIS IN 46254

HENSLER,BENTON MOSES — FP — 186
1415 RAIBLE AVE
ANDERSON IN 46011

HENSLEY,HARRY THOS — FP — 110
11929 E 65TH ST
OAKLANDON IN 46236

HENSON,STEPHEN LLOYD — OTO — 286
2600 GREENBUSH STREET
ARNETT CLINIC
LAFAYETTE IN 47902

HEPNER,HERMAN — FP — 206
705 N STATE ST
KENDALLVILLE IN 46755

HERBST,JERRY — U — 298
221 S 6TH ST
TERRE HAUTE IN 47807

HERENDEEN,THOS LEE — GS — 082
3124 E STATE BLVD
FORT WAYNE IN 46805

HERF,STEVEN MICHAEL — END — 296
421 CHESTNUT STREET
EVANSVILLE IN 47713

HERITIER,CLAUDE J — FP — 326
700 HILL DR
COLUMBIA CITY IN 46725

HERMAN,DANIEL J — ORS — 162
609 DUBOIS ST
VINCENNES IN 47591

HERMAN,JEAN TUCKER — N — 134
7780 MICHIGAN RD
INDIANAPOLIS IN 46268

HERMANN,HAROLD WESLEY — OS — 296
1508 REDWING DR
EVANSVILLE IN 47715

HERMAYER,STEPHEN — OPH — 296
629 WALNUT STREET
EVANSVILLE IN 47708

HERNANDEZ,ILUMINADA C — FP — 174
1802 COLUMBUS DR
EAST CHICAGO IN 46312

HEROD,GILBERT THOS — TS — 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

HERRBERG,JEROME EDWARD — FP — 014
2525 SANDCREST BLVD
COLUMBUS IN 47201

HERRELL,MICHAEL ALAN — PTH — 296
3700 WASHINGTON AVE
EVANSVILLE IN 47750

HERRICK,CHAS LISLE — FP — 090
AKRON IN 46910

HERRING,MALCOLM B — GS — 134
8402 HARCOURT ROAD # 802
INDIANAPOLIS IN 46260

HERRMANN,GORDON T — IM — 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

HERSHBERGER,PHILIP G — ORS — 082
2609 FAIRFIELD AVE
FORT WAYNE IN 46807

HERZBERG,MILTON — FP — 218
222 ELM ST
CLINTON IN 47842

HERZER,CLARENCE C — FP — 296
211 EAST MILL RD
EVANSVILLE IN 47711

HESS,PAUL JOEL — FP — 090
816 MAIN ST
ROCHESTER IN 46975

HESS,PAUL PATRICK — PD — 078
1313 RIDGEWAY
NEW ALBANY IN 47150

HEUBI,JOHN E — PD — 134
6904 N PARK AVE
INDIANAPOLIS IN 46220

HEUMANN,JOHN E — ORS — 296
611 HARRIET ST
EVANSVILLE IN 47710

HEYDE,EDWARD LEE — OPH — 258
513 NORTH MICHIGAN ST
SOUTH BEND IN 46601

HEYMANN,ROBT LAWRENCE — GS — 046
300 NE 14TH
WASHINGTON IN 47501

HIAM,CHARLES GEORGE — FP — 066
R R #3
HUNTINGBURG IN 47542

HIBBELN,FREDERIC P — D — 134
8402 N HARCOURT RD APT 211
INDIANAPOLIS IN 46260

HIBBELN,THOS J — GS — 118
206 MEADOW DR
DANVILLE IN 46122

HIBBS,WM GEO — IM — 158
R R 1
FRANKLIN IN 46131

HIBNER,DAN WM — FP — 314
1020 NORTH J ST
RICHMOND IN 47374

HIBNER,KERMIT QUENTIN — FP — 214
117 N GRANT ST
BLOOMINGTON IN 47401

HIBNER,NOLAN ALBERT — FP — 322
222 S MAIN ST
MONTICELLO IN 47960

HICKMAN,DONALD M — FP — 082
3217 LAKE AVE
FORT WAYNE IN 46805

HICKMAN,HORACE OMER — CD — 134
1500 ALBANY STREET
BEECH GROVE IN 46107

HICKS,GEO WM — OTO — 134
5506 E 16TH
INDIANAPOLIS IN 46218

HICKS,THOS JOS — R — 082
2200 LAKE AVE SUITE 150
FORT WAYNE IN 46805

HIEBER,FRANK REYNOLDS — IM — 174
7905 CALUMET AVE
MUNSTER IN 46321

HIGDON,CHESTER FRANCIS — N — 296
8111 YORKRIDGE
NEWBURG IN 47630

HIGGINS,JACK WAYNE — FP — 126
804 BERKLEY RD
KOKOMO IN 46901

HIGGINS,JAMES LEMMON — FP — 296
524 MARTINS LANE
EVANSVILLE IN 47715

HIGGINS,JOHN ROBINSON — GS — 078
700 EAST SPRING STREET
NEW ALBANY IN 47150

HIGH,RALPH LESLIE — OBG — 062
420 W WASHINGTON ST
MUNCIE IN 47305

HILBERT,JOHN W — OS — 258
APT 405
2900 N GULF SHORE BLVD
NAPLES FL 33940

HILBURN,JEFFREY W — N — 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

HILDEBRAND,JOHN O — FP — 258
1307 E EWING AVE
SOUTH BEND IN 46613

HILDEBRAND,WM LEE — FP — 134
6037 EAST 10TH ST
INDIANAPOLIS IN 46219

HILL,HERBERT NOBLE — FP — 134
3500 LAFAYETTE ROAD
INDIANAPOLIS IN 46222

HILL,JAMES K — A — 134
8801 NORTH MERIDIAN ST
INDIANAPOLIS IN 46260

HILL,JAMES STEPHEN — PD — 082
2828 FAIRFIELD
FORT WAYNE IN 46807

HILL,KENNETH GRIMES — FP — 122
710 S 14TH
NEW CASTLE IN 47362

HILL,LLOYD LEOHN — FP — 194
302 N DUKE ST
PERU IN 46970

HILL,PAUL GOODWIN — FP — 314
5 N FOOTE
CAMBRIDGE CITY IN 47327

HILL,THEODORE ALBERT — P — 178
1606 LAKE SHORE DR
MICHIGAN CITY IN 46360

HILL,WALLACE CLARK — GS — 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

HILLENBRAND,CHAS JOHN — P — 178
128 W 10TH ST
MICHIGAN CITY IN 46360

HILLERY,ROBT LEE — FP — 082
5110 N CLINTON
FORT WAYNE IN 46825

HILLIS,FREDERICK ALLEN — GS — 030
1201 MICHIGAN AVE
LOGANSPORT IN 46947

HILLIS,J STANLEY — CD — 134
8402 HARCOURT RD NO 717
INDIANAPOLIS IN 46260

HILLIS,LOWELL JOS — FP — 030
2410 HASTY HYLL
LOGANSPORT IN 46947

HILLMAN,MARION W — FP — 258
1728 LITTLEPOINTE CIRCLE
SARASOTA FL 33581

HILTON,FRANK LINDEN — OBG — 296
326 S E 7TH
EVANSVILLE IN 47713

HILZ,JAMES MICHAEL — TS — 134
6550 YELLOWSTONE PKWY
INDIANAPOLIS IN 46217

HILZ,MARY ANN CORTESE — R — 134
6550 YELLOWSTONE PKY
INDIANAPOLIS IN 46217

HIMEBAUGH,GILBERT JOS — GS — 296
801 ST MARYS DR NO 307
EVANSVILLE IN 47715

HIMELSTEIN,NATHANIEL H — FP — 134
3500 N LAFAYETTE RD
SUITE 203
INDIANAPOLIS IN 46222

HIMLER,JAMES MURAT — IM — 134
8015 BLUFF RD
INDIANAPOLIS IN 46217

HIMMELSBACH,WM ANTHONY — OM — 070
MILES LAB INC
ELKHART IN 46514

HINCHMAN,JEAN FRANCIS — FP — 062
PARKER IN 47368

HINES,JOHN HENRY — FP — 058
403 S MAIN
AUBURN IN 46706

HINES,KENNETH EARLE — FP — 034
911 S INDIANA AVE
SELLERSBURG IN 47172

HINSHAW,MICHAEL ANTHONY — GS — 314
1250 CHESTER BLVD
RICHMOND IN 47374

HIPPENSTEEL,GERRY M — IM — 162
400 S SIXTH ST
VINCENNES IN 47591

HIPPENSTEEL,HARLAND V — FP — 058
P O BOX 107
AUBURN IN 46706

HIRSCH,HERMAN L — FP — 234
130 W 5TH ST
MOUNT VERNON IN 47620

HIRSCH,MELVIN LEONARD — IM — 174
1842 LAMBERT LANE
MUNSTER IN 46321

HIRSCH,THEODORE — R — 074
R R 6
CONNERSVILLE IN 47331

HITCHCOCK,LARRY GEO — U — 134
7111 EASTWICK LANE
INDIANAPOLIS IN 46256

HITCHCOCK,PHILIP DUDLEY — FP — 296
2828 LINCOLN AVE
EVANSVILLE IN 47714

HO,CHI-YUN US 194
210 WEST BOULEVARD
PERU IN 46970

HO,GLORIA R PD 102
P O BOX 3128
TERRE HAUTE IN 47803

HO,TERRY J OBG 102
P O BOX 3128
TERRE HAUTE IN 47803

HOBBS,ARTHUR A R 296
200 TYLER
EVANSVILLE IN 47715

HOBBS,HUDNER L S PD 134
652 N GIRLS SCHOOL RD NO 110
INDIANAPOLIS IN 46224

HOBGOOD,JAMES LEE AN 296
7526 TAYLOR CIRCLE
EVANSVILLE IN 47710

HODA,ALI ORG 298
221 SOUTH SIXTH ST
TERRE HAUTE IN 47807

HODEL,HARRY LEONARD R 134
7715 COVE CT
INDIANAPOLIS IN 46234

HODGE,DENNIS LEE OBG 296
3700 WASHINGTON AVE
EVANSVILLE IN 47750

HODGES,CHAS DAVID FP 022
905 NORTH LEBANON ST
LEBANON IN 46052

HODGIN,PHILLIP THOS FP 134
1440 EAST 46TH STREET
INDIANAPOLIS IN 46205

HODGIN,PHILLIP THOS FP 210
420 NORTH MAPLE
ORLEANS IN 47452

HODONOS,PHILLIP ELI FP 178
1225 E COOLSPRING AVE
MICHIGAN CITY IN 46360

HOETZER,ELDORE MARTIN FP 082
502 HENRY ST
NEW HAVEN IN 46774

HOFER,DARRELL R FP 062
206 CHARTER DR
MUNCIE IN 47303

HOFF,KENNETH EUGENE US 090
816 MAIN ST
ROCHESTER IN 46975

HOFFMAN,ARTHUR F AN 082
THREE RIVERS APT N RM 105
FORT WAYNE IN 46802

HOFFMAN,MAX NORMAN FP 086
416 UNION ST
COVINGTON IN 47932

HOGAN,MICHAEL ARTHUR PD 134
7514 BROOKVIEW CIRCLE
INDIANAPOLIS IN 46250

HOGAN,THOS W R 298
3505 OHIO BLVD
TERRE HAUTE IN 47803

HOGLE,FRANK D P 178
15 POHCHARTRAIN
MICHIGAN CITY IN 46360

HOHAM,FREDERICK DIXON FP 230
2674 PORTAGE MALL
PORTAGE IN 46368

HOIT,LEONARD D 174
1000 E 80TH
MERRILLVILLE IN 46410

HOLDEMAN,LILLIAN SCHEIB PH 258
LEONARDO ARMS APT 516
7400 ESTERO BLVD UNIT 3
FORT MYERS BEACH FL 33931

HOLDEMAN,RICHARD W IM 258
LEONARDO ARMS APT 516
7400 ESTERO BLVD UNIT 3
FORT MYERS BEACH FL 33931

HOLDEN,ROBT WATSON R 014
R R 1 BOX 575
PLAINFIELD IN 46168

HOLDREAD,JON WAYNE P 014
2510 SANDCREAST BLVD
COLUMBUS IN 47201

HOLL,CARL W R 134
8060 KNUE ROAD
SUITE 117
INDIANAPOLIS IN 46250

HOLLAND,WM MARTIN IM 134
3130 N MERIDAN ST
INDIANAPOLIS IN 46208

HOLLENBERG,ALFRED E FP 314
700 N WASHINGTON ST
HAGERSTOWN IN 47346

HOLLENBERG,EDWARD L FP 238
613 TERRACE DR
WINAMAC IN 46996

HOLLIDAY,ALFONSO DAVID GS 174
919 NORTH UNION ST
GARY IN 46403

HOLLINGSWORTH,THOS H FP 062
217 S CHERRY ST
MUNCIE IN 47305

HOLLIS,KEVIN G IM 078
1919 STATE ST
PROFESSIONAL ARTS BLDG RM 22
NEW ALBANY IN 47150

HOLLOWAY,RICHARD JAMES U 258
211 N EDDY ST
SOUTH BEND IN 46617

HOLM,BYRON MARSH — US — I90
304 NORTH WALNUT ST
PLYMOUTH IN 46563

HOLMAN,JEROME E — FP — I34
3315 EAST 10TH ST
INDIANAPOLIS IN 46201

HOLMAN,JEROME E — OS — I34
6127 NORTH COLLEGE AVE
INDIANAPOLIS IN 46220

HOLMES,JOHN LOUIS — ORS — 062
412 WHITE RIVER BLVD
MUNCIE IN 47303

HOLTZCLAW,DAVID LESLIE — PD — 214
413 W FIRST ST
BLOOMINGTON IN 47401

HOLTZMAN,NORMAN N — IM — 258
514 MAPLE LANE
BATAVIA IL 60510

HOLTZMAN,PAUL WM — IM — 214
113 S LINCOLN ST
BLOOMINGTON IN 47401

HOLWERDA,HARRY LEE — FP — 230
DE MOTTE PHYSICIANS INC
DEMOTTE IN 46310

HONAN,PAUL REVERE — OPH — 022
P O BOX 588
LEBANON IN 46052

HOOD,AINSLEE A — EM — 134
1810 ROSEDALE
INDIANAPOLIS IN 46227

HOOD,TONY EUGENE — AN — 296
DEACONESS HOSP
600 MARY ST
EVANSVILLE IN 47710

HOOG,JOHN MICHAEL — U — 082
527 W BERRY ST
FORT WAYNE IN 46802

HOOKER,DONALD J — FP — 206
104 S MAIN
LIGONIER IN 46767

HOOKER,REX RAYMOND — OS — 174
3210 WATLING ST
EAST CHICAGO IN 46312

HOOPES,JANE MAC LEOD — PD — 296
RR 8 BOX 95
EVANSVILLE IN 47711

HOOVER,J GUY — GS — 296
611 HARRIET ST-STE 501
EVANSVILLE IN 47710

HOOVER,JOSEPH ROYAL — FP — 082
3610 BROOKLYN AVE
FORT WAYNE IN 46809

HOOVER,MICHAEL B — GS — 296
611 HARRIET ST
SUITE NO 501
EVANSVILLE IN 47710

HOOVER,PETER BOWEN — FP — 306
223 W LOCUST ST
BOONVILLE IN 47601

HOPKINS,BRUCE JORDAN — OTO — I34
8402 HARCOURT RD STE 208
INDIANAPOLIS IN 46260

HORINE,RANDALL KEITH — IM — I34
8402 HARCOURT RD
INDIANAPOLIS IN 46260

HORLANDER,FRIDOLIN SCOTT — FP — 034
GATEWAY PLAZA
JEFFERSONVILLE IN 47130

HORNBACK,NED B — TR — I34
I U MEDICAL CENTER
INDIANAPOLIS IN 46202

HORNER,TERRY GRANT — NS — 134
SUITE 408
1633 N CAPITOL AVE
INDIANAPOLIS IN 46202

HORNING,RICHARD R — IM — 030
R R 2 BOX 81
LOGANSPORT IN 46947

HORST,WM NICHOLAS — FP — 174
123 N COURT ST
CROWN POINT IN 46307

HORSWELL,RICHARD GLENN — IM — 070
P O BOX 158
BRISTOL IN 46507

HORSWELL,RICHARD R — IM — 286
2600 GREENBUSH
LAFAYETTE IN 47904

HORTON,DOUGLAS JAY — IM — 134
1815 NORTH CAPITOL AVENUE
INDIANAPOLIS IN 46202

HORVATH,GEO ALEXANDER — PD — 258
211 N EDDY ST
SOUTH BEND IN 46617

HORVATH,JOHN LOUIS — TR — 258
919 E. JEFFERSON BLVD.
SUITE 207
SOUTH BEND IN 46622

HOSTETTER,MICHAEL G — U — I34
8220 NAAB ROAD APT 302
INDIANAPOLIS IN 46260

HOUCK,RICHARD JAMES — OPH — 178
P O BOX 556
BEVERLY SHORES IN 46301

HOUSER,D DUANE — A — 134
1815 NORTH CAPITOL AVE NO 309
INDIANAPOLIS IN 46202

HOUSER,DEWARD S — OBG — 258
515 NORTH LAFAYETTE BLVD
SOUTH BEND IN 46601

HOUSER,KEIM THOS — OBG — 258
515 NORTH LAFAYETTE
SOUTH BEND IN 46601

HOUSER,WM CHAS — IM — 296
COLUMBIA PHYSICIAN CTR
SUITE 410
EVANSVILLE IN 47710

HOUSTON,FRED DURMENT — FP — 050
30 W HIGH ST
LAWRENCEBURG IN 47025

HOVANESSIAN,RAFFY A — GE — 174
7863 BROADWAY
MERRILLVILLE IN 46410

HOW,LOUIS EUGENE — GPM — 258
210 PATTERSON RD
LAKEVILLE IN 46536

HOWARD,JAMES THOS — OBG — 214
619 W 1ST ST
BLOOMINGTON IN 47401

HOWARD,JOS DANL — FP — 030
1139 HARBOR LANE
GULF BREEZE FL 32561

HOWARD,MARY JANE — CD — 134
RR 3 BOX 89-17
ZIONSVILLE IN 46077

HOWARD,PAUL FREDERICK — CD — 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

HOWARD,WM FRANK — OBG — 214
619 W 1ST ST
BLOOMINGTON IN 47401

HOWELL,JOS D — A — 134
6525 E 82ND ST-STE 110
INDIANAPOLIS IN 46250

HOWLAND,CARL BRUCE — FP — 198
1500 DARLINGTON AVE
CRAWFORDSVILLE IN 47933

HOYT,LESTER HAROLD — PTH — 134
METHODIST HOSP
INDIANAPOLIS IN 46202

HOYT,MILLARD L — P — 134
5614 E 21ST ST
INDIANAPOLIS IN 46218

HRISOMALOS,FRANK N — FP — 214
1403 EAST ATWATER AVE
BLOOMINGTON IN 47401

HTAIN,MIN — R — 298
221 S 6TH ST
TERRE HAUTE IN 47801

HUANG,TSAU-YUEN — PTH — 174
ST MARYS MEDICAL CENTER
GARY IN 46402

HUBBARD,JESSE D — PTH — 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46207

HUBER,RICHARD GLEN — FP — 182
219 SYCAMORE DR
BEDFORD IN 47421

HUGGINS,VICTOR SPENCER — OBG — 296
611 HARRIETT AVE
EVANSVILLE IN 47710

HUGHES,ANSON F — OBG — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

HUGHES,CHAS EDGAR — PS — 134
5626 E 16TH ST
INDIANAPOLIS IN 46218

HUGHES,MICHAEL A — US — 318
303 S MAIN ST
BLUFFTON IN 46714

HUGHES,RICHARD R — EM — 286
908 CARROLTON BLVD
WEST LAFAYETTE IN 47906

HUGHES,WM BRADLEY — FP — 058
WATERLOO IN 46793

HULL,DE WAYNE L — PS — 082
1333 MAYCREST
FORT WAYNE IN 46805

HULL,JAMES EDWARD — GS — 286
ST ELIZABETH MED CTR STE 104
LAFAYETTE IN 47904

HULL,JOEL IRVIN — FP — 230
DUNE ACRES
6 SHORE DR
CHESTERTON IN 46304

HULL,RONALD H — P — 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

HUMMEL,RUSSEL MILLER — FP — 098
500 WABASH AVE
MARION IN 46952

HUMPHREY,PAUL EUGENE — U — 298
2631 NORTH 9TH ST
TERRE HAUTE IN 47807

HUMPHREYS,JOE E — FP — 162
1516 N 2D ST
VINCENNES IN 47591

HUMPHREYS,JOHN LESLIE — OS — 082
55 HIGHLAND RD APT 202
BETHEL PARK PA 15102

HUNSBERGER,DONALD WAYNE — FP — 062
101 SOUTH JEFFERSON ST
MONTPELIER IN 47359

HUNSBERGER,WALTER G — R — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

HUNT,EDGAR JOHN OS 298
R R 22 BOX 416
TERRE HAUTE IN 47802

HUNT,JAMES ANDREW P 134
RR1 BOX 218-H
PITTSBORO IN 46167

HUNT,ROBERT N IM 258
211 NORTH EDDY STREET
SOUTH BEND IN 46617

HUNTEMAN,ROY KEITH FP 314
1020 NORTH J ST
RICHMOND IN 47374

HUNTER,CHAS A OBG 134
IND UNIV MED CTR DEPT OBG
INDIANAPOLIS IN 46202

HUNTER,DEAN MURRAY OBG 286
316 N SALISBURY
WEST LAFAYETTE IN 47906

HUNTER,DONN R FP 110
843 MAPLE DR
GREENFIELD IN 46140

HUNTER,HARRY L ON 296
R R 4 BOX 202
EVANSVILLE IN 47712

HUONI,JOHN SIMEON FP 034
1405 YOUNGSTOWN SHOPPING CTR
JEFFERSONVILLE IN 47130

HURLEY,JAMES W GE 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

HURLEY,JOHN RAWLINS FP 062
BOX 545
DALEVILLE IN 47334

HURT,LAVERNE B OS 134
3102 PALM DR
DELRAY BEACH FL 33444

HURWITZ,ROBT MORRIS D 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

HURWITZ,ROGER ALLEN PDC 134
I U MEDICAL CENTER
INDIANAPOLIS IN 46202

HUSE,JOHN GS 134
1815 N CAPITOL AVE #404
INDIANAPOLIS IN 46202

HUSE,PATRICIA GAIL H PD 134
4115 OFFICE PLAZA BLVD
INDIANAPOLIS IN 46254

HUSE,WM MURRAY OBG 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

HUSSAIN,MOHAMMED CD 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

HUSSEY,LAWRENCE KENT PTH 258
531 NORTH MAIN ST
SOUTH BEND IN 46601

HUSTED,ROBT G FP 174
7905 CALUMET AVE
MUNSTER IN 46321

HUTCHISON,J C 146
322 S MAIN ST
DUNKIRK IN 47336

HUTSON,RICHARD ALLEN ORS 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

HUUS,JOHN CHRISTIAN U 296
421 CHESTNUT ST
EVANSVILLE IN 47713

HYDE,CARROLL C U 258
1521 E COLFAX AVE
SOUTH BEND IN 46617

IGNACIO,DOMINADOR GIANAN OBG 314
308 MEDICAL ARTS BLDG
RICHMOND IN 47374

IGNACIO,OLEGARIO J N 034
207 SPARKS AVENUE
JEFFERSONVILLE IN 47130

ILLMAN,DWAIN CLARK EM 214
4427 W TANGLEWOOD
BLOOMINGTON IN 47401

IMHOF,JOS D DR 062
320 W ADAMS
MUNCIE IN 47305

IMPERIAL,BENJAMIN E FP 174
BOX 277
ST JOHN IN 46373

IMPERIAL,BORIS S P 298
1024 S 6TH ST MEDICAL ARTS BLD
TERRE HAUTE IN 47807

INGRAM,RICHARD GENE FP 062
206 S MAIN
MONTPELIER IN 47359

INGWELL,GUY BERNARD FP 274
UNIVERSITY TOWERS
1201 RICHMOND ST NORTH NO 519
LONDON ONTARIO CANADA D0650

INLOW,PAUL MARTYN R 266
103 W WASHINGTON ST
SHELBYVILLE IN 46176

INLOW,ROBT PIERSON GS 266
103 W WASHINGTON
SHELBYVILLE IN 46176

INLOW,WM D GS 266
1072 ALTO ROAD
LAKE WORTH FL 33460

IRELAND,PHILIP HARLEY ORS 134
8220 NAAB ROAD
INDIANAPOLIS IN 46260

IRICK,NEIL EDWIN — IM — 318
2202 WEST MORRIS STREET
INDIANAPOLIS IN 46221

IRIGOYEN,DAVID ERNEST — P — 078
1919 STATE ST STE 321
NEW ALBANY IN 47150

IRMSCHER,GEO W — GS — D82
3411 N ANTHONY BLVD
FORT WAYNE IN 46805

IRMSCHER,JANE MC MULLEN — PD — D82
2024 FLORIDA DR
FORT WAYNE IN 46805

IRVINE,WILLIAM O — ORS — 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

IRWIN,GERALD PORT — FP — I86
P O BOX 124
STATE ROAD 9 SOUTH
ALEXANDRIA IN 46001

IRWIN,GLENN WARD — IM — 134
5801 SUNSET LANE
INDIANAPOLIS IN 46208

IRWIN,PHYLLIS R — FP — I34
QALANDARABAD HAZARA
BACH CHRISTIAN HOSPITAL
PAKISTAN

IRWIN,RICHARD STEPHEN — FP — 118
P O BOX 345
ROACHDALE IN 46172

ISCH,JOHN HARRY — TS — 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

ISENBARGER,KARL — FP — 134
111 E 75TH
INDIANAPOLIS IN 46240

ISENBERG,MICHAEL T — GE — D82
DEUMLING CLINIC
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

ISENBERG,PAUL DAVID — PD — 134
5626 E 16TH
INDIANAPOLIS IN 46218

ISENOGLE,KENNETH F — OTD — D82
3030 LAKE AVE
FORT WAYNE IN 46805

ISKE,PAUL GED — IM — 134
818 E 79TH ST
INDIANAPOLIS IN 46240

ISLAM,RASHIDUL — GS — 114
2081 BANNER AVE
CORYDON IN 47112

IVERSON,ROBERT LOUIS — US — 134
4134 NORTH ILLINOIS
INDIANAPOLIS IN 46208

IVY,JOHN H — IM — 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

JACKSON,DEAN B — FP — 278
310 NORTH WAYNE
ANGOLA IN 46703

JACKSON,HOWARD CLAY — FP — I50
104 E 3RD ST
MADISON IN 47250

JACKSON,JAMES WOODROW — CD — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

JACKSON,JOHN F — AN — D82
105 THREE RIVERS NORTH
FORT WAYNE IN 46802

JACKSON,JOHN SCHOOLING — IM — 314
1250 CHESTER BLVD
RICHMOND IN 47374

JACKSON,ROBT FRANKLIN — GS — 098
109 PROFESSIONAL ARTS BLDG
500 WABASH AVE
MARION IN 46952

JACOBI,MARK DAVID — PD — 178
1225 E COOLSPRING AVE
MICHIGAN CITY IN 46360

JACOBO,MIGUEL JAIME — FP — 174
800 MAC ARTHUR BLVD
MUNSTER IN 46321

JACOBS,E ROBERT — GS — 014
R R 6 GRANDVIEW
COLUMBUS IN 47201

JACOBSON,WM — PTH — 286
1501 HARTFORD ST
ST ELIZABETH HOSP
LAFAYETTE IN 47904

JACOMAIN,RALPH JOS — FP — 162
621 S 7TH ST
VINCENNES IN 47591

JAGER,RAMA M — CRS — 134
5502 EAST 16TH ST
SUITE 34
INDIANAPOLIS IN 46218

JAHNS,ALBIN A — DRS — 230
2501 CUMBERLAND DR
VALPARAISO IN 46383

JAMES,CARROLL FLOYD — FP — 014
HOPE MED CTR
HOPE IN 47246

JAMES,CHAS EDWARD — FP — I34
7780 N MICHIGAN
INDIANAPOLIS IN 46268

JAMES,THOS — GS — 130
202 PUB BLDG
HUNTINGTON IN 46750

JAMESON,ROBERT J — OTO — 134
926 W MAIN STREET
MUNCIE IN 47302

JANI,NATWERLAL S — FP — 134
3332 MAC ARTHUR LANE
INDIANAPOLIS IN 46224

JANICKI,DAVID JOHN — IM — 298
221 SOUTH SIXTH ST
TERRE HAUTE IN 47807

JANKOWSKI,ERNEST BERNARD — FP — 258
411 S SHERIDAN ST
SOUTH BEND IN 46619

JANOVSKY,CHARLES T — FP — 178
1225 EAST COOLSPRING AVE
MICHIGAN CITY IN 46360

JANSCH,MARJORIE E DUPONT — PD — 082
R R 3 BOX 53
AMERICAN RED CROSS
GRABILL IN 46741

JANSCH,THEODORE LEO — PTH — 082
700 BROADWAY
FORT WAYNE IN 46802

JAO,RODOLFO L — ID — 174
295 SOUTH WISCONSIN
HOBART IN 46342

JAOJOCO,ARMANDO E — FP — 250
P O BOX 147
BATESVILLE IN 47006

JARDENIL,ROMULO S — FP — 204

KENTLAND IN 47951

JARDINE,DON ROSS — ORS — 134
3500 LAFAYETTE RD
INDIANAPOLIS IN 46222

JARRETT,DAVID G — OBG — 158
1944 BLAZING TRAIL COURT
INDIANAPOLIS, IN 46217

JARRETT,JOHN CROW — OBG — 098
702 RIVER DR
MARION IN 46952

JARRETT,PAUL EUGENE — OBG — 134
8330 NAAB ROAD
INDIANAPOLIS IN 46260

JARRETT,PAUL EUGENE — OBG — 186
2101 JACKSON #210
ANDERSON IN 46014

JASTREMSKI,CHESTER A — FP — 214
300 WEST 1ST ST
BLOOMINGTON IN 47401

JAY,ARTHUR CARL — PTH — 062
R R 1 BOX 387
PARKER IN 47368

JAY,JAMES MILTON — IM — 134
1645 HALL PL
INDIANAPOLIS IN 46202

JAY,STEPHEN J — IM — 134
7435 CENTRAL AVE
INDIANAPOLIS IN 46240

JEAN,THOS A — FP — 266

MORRISTOWN IN 46161

JEFFERIS,KENNETH R — GS — 062
420 WEST WASHINGTON
MUNCIE IN 47305

JEFFREY,ROBERT CHARLES — AN — 014
3522 DEERFIELD PLACE
COLUMBUS IN 47201

JEHA,MIKHAIL FARID — DR — 174
2525 E LAKE SHORE DR
CROWN POINT IN 46307

JEHANYAR,MOHAMED ALI — FP — 322
P O BOX 614
MONTICELLO IN 47960

JENKINS,JOHN EDWARD — FP — 134
3740 N CENTRAL
INDIANAPOLIS IN 46208

JENKINS,JOHN L — CD — 258
919 EAST JEFFERSON BLVD
SUITE 309 JEFF MED ARTS BLDG
SOUTH BEND IN 46617

JENKINS,ROBT EUGENE — D — 134
3500 LAFAYETTE RD STE 104
INDIANAPOLIS IN 46222

JENSEN,JAMES WALDEMAR — OBG — 178
1511 WABASH
MICHIGAN CITY IN 46360

JENSEN,ROBT EUGENE — OTO — 082
102 MEDICAL CENTER BLDG
FORT WAYNE IN 46802

JESCH,DORIS ANN — PD — 098
706 GARDNER
MARION IN 46952

JESSEPH,JOHN ERVIN — GS — 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

JETT,CLYDE W — FP — 298
P O BOX 308
SEELYVILLE IN 47878

JEWELL,GEO MONROE — A — 126
ARMSTRONG LANDON BLDG
KOKOMO IN 46901

JEWETT,JOE HAINES — IM — 134
3120 N MERIDIAN ST
INDIANAPOLIS IN 46208

JIMENEZ,FELICIANO F — IM — 174
800 MC ARTHUR NO 22
MUNSTER IN 46321

JIMENEZ,PEORO L — AN — 034
727 MARTHA AVE
JEFFERSONVILLE IN 47130

JINNINGS,LOREN EARL — FP — 058
P O BOX R R 3
AUBURN IN 46706

JOBES,JAMES EPLEY — OM — 134
4265 KNOLLTON ROAD
INDIANAPOLIS IN 46208

JOCSON,CATALINO T — FP — 102
R R 2
LINTON IN 47441

JOHN,K THOMAS — IM — 238
PULASKI MEMORIAL HOSPITAL
WINAMAC IN 46996

JOHN,MAURICE EDWARD — OPH — 034
207 SPARKS AVE NO 306
JEFFERSONVILLE IN 47130

JOHNLOZ,DAVID KEITH — IM — 214
419 WEST IST STREET
BLOOMINGTON IN 47401

JOHNS,JANET SUSAN — FP — 286
3510 WOODCLIFF
LAFAYETTE IN 47905

JOHNSON,A CEDRIC — GS — 134
1815 N CAPITOL ST
INDIANAPOLIS IN 46202

JOHNSON,ARNOLD LEE — OBG — 174
2200 GRANT ST
GARY IN 46404

JOHNSON,CHAS WM — OTO — 134
1802 NORTH ILLINOIS ST
INDIANAPOLIS IN 46204

JOHNSON,EARL HUNT — U — 134
4801 PLANTATION DR
INDIANAPOLIS IN 46250

JOHNSON,FRANCIS NEAL — AN — 174
890 WEST 52ND DR
MERRILLVILLE IN 46410

JOHNSON,FRANK — OBG — 134
2948 KESSLER BLVD N DRIVE
INDIANAPOLIS IN 46222

JOHNSON,GEO MARTIN — GS — 314
1250 CHESTER BLVD
RICHMOND IN 47374

JOHNSON,HAROLD VICTOR — FP — 296
2301 W MICHIGAN ST
EVANSVILLE IN 47712

JOHNSON,HERBERT S — GS — 286
2600 GREENBUSH
LAFAYETTE IN 47904

JOHNSON,JAMES ALLEN — AN — 314
3031 VIPOST RD
RICHMOND IN 47374

JOHNSON,JAMES BASHFORD — FP — 242
600 N ARLINGTON
GREENCASTLE IN 46135

JOHNSON,JOHN CARLTON — FP — 134
ADMINISTRATION W B H
401 S E 6TH ST
EVANSVILLE IN 47713

JOHNSON,MICHAEL LEWIS — P — 214
4315 E THIRD ST
SUITE 7
BLOOMINGTON IN 47401

JOHNSON,PAUL DEWEY — GS — 298
822 N 15TH ST
TERRE HAUTE IN 47807

JOHNSON,PHILIP JAMES — FP — 082
2414 EAST STATE ST.
FORT WAYNE IN 46805

JOHNSON,ROBT DONALD — FP — 150
722 W MAIN ST
MADISON IN 47250

JOHNSON,STEPHEN LEE — IM — 296
611 HARRIETT SUITE 202
EVANSVILLE IN 47710

JOHNSON,THOS WILSON — OTO — 134
1802 N ILLINOIS ST
INDIANAPOLIS IN 46202

JOHNSON,WALLACE D — GE — 182
2900 W 16TH ST
BEDFORD IN 47421

JOHNSON,WILLIAM F — GE — 296
3700 BELLEMEADE
EVANSVILLE IN 47715

JOHNSON,WM VERNON — R — 078
1919 STATE ST
NEW ALBANY IN 47150

JOHNSTON,CRAIG RAYMOND — FP — 134
5715 N COLLEGE AVE
INDIANAPOLIS IN 46218

JOHNSTON,GERALD P — P — 134
1575 NORTHWESTERN AVE
INDIANAPOLIS IN 46202

JOHNSTON,RICHARD M — AN — 082
2330 BEACON ST #109
FORT WAYNE IN 46805

JOHNSTON,ROBT L — GE — 318
BOX 111
MELBOURNE BEACH FL 32951

JOHNSTONE,DOUGLAS F — IM — 134
2020 W 86TH STREET
INDIANAPOLIS IN 46260

JOLLY,WALTER WM — TS — 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

JONES,ALLEN WM — IM — 134
6060 N COLLEGE AVE
INDIANAPOLIS IN 46220

JONES,ANABEL RATCLIFF AN 286
3301 CEDAR LANE
LAFAYETTE IN 47904

JONES,DAVID ERVAN OTO 134
320 N MERIDIAN ST
INDIANAPOLIS IN 46204

JONES,DAVID GEO FP 186
1504 N MADISON
ANDERSON IN 46011

JONES,DAVID HALE FP 034
935 WATER ST
CHARLESTOWN IN 47111

JONES,E F R 142
1104 E GRACE ST RADIOLOGY DEPT
JASPER CNTY HOSP
RENSSELAER IN 47978

JONES,FRANCIS PAUL AN 134
745 N RILEY AVE
INDIANAPOLIS IN 46201

JONES,FREDERICK HAVEN N 134
NEUROLOGY DEPARTMENT
960 LOCKE ST
INDIANAPOLIS IN 46202

JONES,GORDON CHAS FP 134
6360 BRANSHAW RD
INDIANAPOLIS IN 46220

JONES,HENRY LEE PD 134
5610 CRAWFORDSVILLE ROAD
SUITE #5
INDIANAPOLIS IN 46224

JONES,JOHN CARL PD 030
1201 MICHIGAN AVE STE B
LOGANSPORT IN 46947

JONES,JOHN DAVID DPH 186
1719 NORTH MADISON AVE
ANDERSON IN 46012

JONES,KING SOLOMON FP 178
P O BOX 383
MICHIGAN CITY IN 46360

JONES,RANDOLPH OBG 134
2416 N CAPITOL
INDIANAPOLIS IN 46208

JONES,RICHARD ALLEN OTO 134
8402 N HARCOURT RD STE 208
INDIANAPOLIS IN 46260

JONES,ROBT B OTO 070
1528 W FRANK
ELKHART IN 46514

JONES,THOMAS A FP 134
1100 W MICHIGAN ST
DEPT FAMILY MED
INDIANAPOLIS IN 46202

JONES,THOS MORRIS OTO 078
2580 CHARLESTOWN ROAD
NEW ALBANY IN 47150

JONES,WM HOWARD FP 202
1630 SOUTH OHIO
MARTINSVILLE IN 46151

JONTZ,JOE GORDON GS 082
3124 E STATE BLVD
FORT WAYNE IN 46805

JONTZ,JON PHILLIP AN 134
11929 FOREST DRIVE
CARMEL IN 46032

JONTZ,RICHARD LEE R 082
2200 LAKE AVE SUITE 150
FORT WAYNE IN 46805

JORDAN,LEE GEO GE 134
3130 NORTH MERIDIAN STREET
INDIANAPOLIS IN 46208

JORDAN,RICHARD ALLEN FP 034
JEFFERSON MEDICAL ARTS BLDG
207 SPARKS AVE
JEFFERSONVILLE IN 47130

JOSEPH,REX MORRIS FP 134
1500 ALBANY
BEECH GROVE IN 46107

JOSEPHSON,DAVID ALAN N 134
10915 LAKEVIEW DR
CARMEL IN 46032

JOSHI,PRAKASH NARAYAN IM 098
1251 KEM ROAD
SUITE B & C
MARION IN 46952

JOSLIN,GEO DAVID P 082
909 E STATE BLVD
FORT WAYNE IN 46805

JOYNER,JOHN ERWIN NS 134
3202 N MERIDIAN ST
EAST BLDG SUITE 201
INDIANAPOLIS IN 46208

JUDD,RUSSELL LLOYD U 134
1213 N ARLINGTON
INDIANAPOLIS IN 46219

JUDSON,WALTER EMERY CO 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

JUERGENS,RICHARD BOWMAN FP 082
1724 PRAIRIE LANE
FORT WAYNE IN 46808

JUREZIZ,RONALD EDWARD GS 258
720 E CEDAR ST STE 280
SOUTH BEND IN 46617

JURGENSEN,WALTER T FP 082
3610 BROOKLYN AVE
FORT WAYNE IN 46807

JUSTIN,RENATE G FP 298
1655 NORTH 7TH ST
NORTHSIDE PROFESSIONAL BLDG
TERRE HAUTE IN 47804

KACHMANN,RUDOLF NS 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

KADERABEK,DONAL JOS GS 182
1611 25TH STREET SUITE B
BEDFORD IN 47421

KAHLER,MAURICE V FP 134

STAR CITY IN 46985

KAHN,ALEXANDER JEROME PD 134
8402 HARCOURT NO 406
INDIANAPOLIS IN 46260

KAHN,HOWARD L OBG 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

KAISER,JAMES L ORS 134
1500 N RITTER ROOM #3521
INDIANAPOLIS IN 46219

KALKER,MORTON AN 062
704 GREENBRIAR RD
MUNCIE IN 47304

KALSBECK,JOHN E NS 134
1100 W MICHIGAN AVE
INDIANAPOLIS IN 46202

KAMEN,JACK M AN 174
440 NORTH TIPPECANOE PL
GARY IN 46403

KAMMEN,LEO FP 134
7030 CENTRAL
INDIANAPOLIS IN 46220

KAMMER,GRACE E CLEM IM 062
420 W WASHINGTON ST
MUNCIE IN 47305

KAMMEYER,WM ALLEN FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

KANDUL,THOS STANLEY PTH 296
3700 WASHINGTON AVE
EVANSVILLE IN 47750

KANE,JACK LEE OPH 134
50 EAST 91ST STREET
INDIANAPOLIS IN 46240

KANTZER,FLOYD BERNHARD 058
12436 MORROW AVE N E
ALBUQUERQUE NM 87112

KAPLAN,JOSHUA M PS 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

KAPLAN,MARTIN JEROME GE 082
3030 LAKE AVENUE
FORT WAYNE IN 46805

KAPOOR,GURBACHAN SINGH R 174
8701 BROADWAY
MERRILLVILLE IN 46410

KARBERG,RICHARD JOHN OBG 286
2400 FERRY ST
LAFAYETTE IN 47904

KARN,JOHN W AN 258
1535 WALL ST
SOUTH BEND IN 46615

KARNAFEL,EUGENE THADDEUS P 030
LOGANSPORT STATE HOSP
LOGANSPORT IN 46947

KAROL,HERBERT JAY U 082
SUITE 103 3-RIVERS E
FORT WAYNE IN 46802

KARSELL,WM A OBG 134
BOX 2958 R R 2
CARMEL IN 46032

KASTING,GERALD E FP 182
1622 24TH ST
BEDFORD IN 47421

KATTERJOHN,JAMES CECIL TR 134
8411 QUAIL HOLLOW ROAD
INDIANAPOLIS IN 46260

KAUFFMAN,HARLEY MARLEY P 296
5607 NEWBURG RD
EVANSVILLE IN 47715

KAUFMAN,ALAN NS 174
30 DOUGLAS ST
HAMMOND IN 46324

KAUFMAN,JULIAN ROWE A 082
3030 LAKE AVE
FORT WAYNE IN 46805

KAUFMAN,MAURICE IM 134
3000 MEADOWS PKWY
INDIANAPOLIS IN 46205

KAVEGGIA,LASZLO U 046
1400 GRAND AVE
WASHINGTON IN 47501

KAY,JOHN BOYD FP 130
1255 ENGLE ST
MEDICAL ARTS BLDG
HUNTINGTON IN 46750

KAYE,ROBERT C FP 142
1103 E GRACE ST
RENSSELAER IN 47978

KAYE,STERLING S 186
COMMUNITY HOSP
DEPT OF RADIOLOGY
ANDERSON IN 46011

KAYS,LARRY P N 296
611 HARRIET ST
EVANSVILLE IN 47710

KEATING,JOHN URICH P 134
8415 WASHINGTON BLVD
INDIANAPOLIS IN 46240

KEBEL,ARTHUR PAUL OM 134
4411 N MERIDIAN
INDIANAPOLIS IN 46208

KECK,CARLETON ALLEN — OPH — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

KEEFE,WILLIAM E — GS — 142
1103 EAST GRACE
RENSSELAER IN 47978

KEELING,FORREST E — PD — 146
615 W WALNUT
PORTLAND IN 47371

KEENAN,GEO BRYAN — FP — 134
3225 SHELBY AVE
INDIANAPOLIS IN 46227

KEENAN,PATRICK JUSTIN — N — 258
211 N EDDY ST
SOUTH BEND IN 46617

KEENER,GERALD THERON — OPH — 134
5508 E 16TH ST
INDIANAPOLIS IN 46218

KEFFER,HARRY LEE — AN — 298
UNION HOSPITAL
TERRE HAUTE IN 47808

KELLAMS,JEFFREY J — P — 134
8210 SOUTH MADISON AVE
INDIANAPOLIS IN 46227

KELLAR,PHILIP ERNEST — FP — 174
PO BOX 129
HOBART IN 46342

KELLEY,JACK LESLIE — GS — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

KELLEY,WM EDWARD — FP — 134
5502 EAST 16TH ST
MEDICAL SCHIENCE BLDG
INDIANAPOLIS IN 46218

KELLY,GEO GREGORY — GS — 174
7905 CALUMET AVE
MUNSTER IN 46321

KELSEY,JUDITH ANN — DR — 174
180 E PEARSON APT 6706
CHICAGO IL 60611

KELSEY,ROBT MOFFAT — FP — 178
1200 MICHIGAN AVE
LA PORTE IN 46350

KEMKER,BERNARD PERKINS — GS — 066
721 W 13TH ST
MED ARTS BLDG
JASPER IN 47546

KEMP,JOHN THEODORE — FP — 178
122 E 7TH ST
MICHIGAN CITY IN 46360

KEMPER,CHARLES F — PDA — 034
SUITE 406
207 SPARKS AVE
JEFFERSONVILLE IN 47130

KEMPF,GERALD FIDELIS — IM — 218
3375 DRAKE RD
LEBANON OH 45036

KEMPLER,NORMAN ALAN — OPH — 082
3124 EAST STATE BLVD
FORT WAYNE IN 46805

KENCOS,JOHN — IM — 174
6800 LEXINGTON LANE
NILES IL 60648

KENDALL,FOREST MACK — EM — 070
654 WOODLAND CT
NAPPANEE IN 46550

KENDRICK,FRANK JENNESS — D — 174
OAK COURT C 1-2
2000 SO 15TH ST
GOSHEN IN 46526

KENDRICK,WM M — U — 202
1201 HADLEY RD NW
MOORESVILLE IN 46158

KENLEY,DAVID JOHN — OBG — 134
313 E CARMEL DR #D
CARMEL IN 46032

KENNEDY,DAVID B — P — 126
R R NO 1
RUSSIAVILLE IN 46979

KENNEDY,HUNTER FELIX — FP — 134
50268 ALLISONVILLE ROAD
INDIANAPOLIS IN 46205

KENNEDY,JOHN WAYNE — EM — 098
2725 N VALHALLA DR
MARION IN 46952

KENNEDY,JOS T — AN — 134
5316 BRENDONRIDGE RD
INDIANAPOLIS IN 46226

KENNEDY,MACHIEL NEIL — FP — 258
52303 EMMONS RD
SOUTH BEND IN 46637

KENNEDY,MICHAEL WM — GS — 106
495 WESTFIELD RD
NOBLESVILLE IN 46060

KENNEY,DAVID BERNARD — OPH — 134
5506 E 16TH ST SUITE 13
INDIANAPOLIS IN 46218

KENNEY,FRANCIS DAVID — GS — 174
110 RIDGE RD
MUNSTER IN 46321

KENT,RICHARD NELSON — IM — 082
327 MED CTR BLDG
FORT WAYNE IN 46802

KENYON,CHAS EMIL — FP — 314
8 S GREEN ST
CAMBRIDGE CITY IN 47327

KEOUGH,THOS FRANCIS — CD — 166
600 E WINONA AVE
WARSAW IN 46580

KEPHART,STEWART BRUCE OBG 318
303 S MAIN ST
BLUFFTON IN 46714

KEPLINGER,JAMES ELLIS NS 286
1000 NORTH 14TH ST
LAFAYETTE IN 47904

KEPNER,ROBT STANLEY PD 186
1431 N MADISON AVE
ANDERSON IN 46012

KERLIN,JOS C FP 118
100 MEADOW DR
DANVILLE IN 46122

KERN,CLARENCE GERALD FP 022
P O BOX 46
LEBANON IN 46052

KERNEK,CLYDE BALDWIN ORS 134
3609 BRIAN PL
CARMEL IN 46032

KERNER,DONALD JOE FP 134
7819 SOUTH BELMONT
INDIANAPOLIS IN 46217

KERR,DONALD MILTON FP 182
2900 W 16TH ST
BEDFORD IN 47421

KERRIGAN,ROBT LEE FP 178
916 WASHINGTON ST
MICHIGAN CITY IN 46360

KERRIGAN,WM F AN 074
PROF ARTS BLDG
707 WEST 3RD ST
CONNERSVILLE IN 47331

KERSHNER,CHARLES R ORS 098
707 RIVER DR
MARION IN 46952

KESIM,MUFIT HUSAM PD 070
1332 W INDIANA AVE
ELKHART IN 46514

KESKIN,IBRAHIM AN 174
5217 HOHMAN AVE
HAMMOND IN 46320

KESSLER,ROBT B FP 296
611 HARRIET RM 305
EVANSVILLE IN 47710

KETTELKAMP,DONALD B ORS 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

KEYE,WILLIAM R OBG 318
CAYLOR-NICKEL CLINIC
BLUFFTON IN 46714

KEYES,RICHARD F PD 162
514 SOUTH 9TH ST
VINCENNES IN 47591

KEYES,ROBT C PD 082
131 E TILLMAN RD
FORT WAYNE IN 46816

KHAIRI,MOHAMMAD R ABUL END 134
8330 NAAB ROAD
SUITE 303
INDIANAPOLIS IN 46260

KHALOUF,HERBERT CHAS GS 098
1251 W KEM ROAD
MARION IN 46952

KHALOUF,SHIRLEY THOMPSON PM 098
1204 OVERLOOK DR
MARION IN 46952

KHATON,ODESSA M P 174
504 BROADWAY
GARY IN 46402

KHO,EUSEBIO C GS 262
137 E MC CLAIN AVE
SCOTTSBURG IN 47170

KHO,JAMES B PTH 298
112 BRIARWOOD LN
TERRE HAUTE IN 47803

KIECHLE,FREDERICK L PTH 296
R R 4 BOX 309 NO 3 SCHOOL ROAD
EVANSVILLE IN 47712

KIEHM,TAE GEE IM 258
SUITE 110
303 S MAIN ST
MISHAWAKA IN 46544

KIELY,JOHN T FP 186
1931 BROWN ST
ANDERSON IN 46014

KIGHT,JERRY LEE DR 134
8110 MORNINGSIDE DRIVE
INDIANAPOLIS IN 46240

KILGORE,BYRON W P 082
3110 GLEN CAIRN DR
FORT WAYNE IN 46815

KILLEN,LARRY RAY DR 134
7019 EASTWICK LN
INDIANAPOLIS IN 46256

KILMER,WARREN L GS 230
2674 P PORTAGE MALL
PORTAGE IN 46368

KIM,BUM JOO OBG 258
513 NORTH MICHIGAN ST
SOUTH BEND IN 46601

KIM,CHANG YOUNG P 298
1024 SOUTH 6TH STREET
TERRE HAUTE IN 47807

KIM,CHINSOO WHANG PD 174
9609 WHITE OAK
MUNSTER IN 46321

KIM,CHONG SOO AN 296
2210 S E BROWNING RD
EVANSVILLE IN 47711

KIM,CHONG-BIN PD 014
3200 SYCAMORE CT SUITE 2-A
COLUMBUS IN 47201

KIM,EUN YONG R I66
27 FAIRLANE DRIVE
WARSAW IN 46580

KIM,HWA WOONG AN 298
608 PUTTERPOINT F
TERRE HAUTE IN 47802

KIM,I YOUNG DAI OS 134
1539 NE 143RD
SEATTLE WA 98125

KIM,IL HO OBG I66
422 S BUFFALO ST
WARSAW IN 46580

KIM,JOON SUN PTH I78
LA PORTE HOSP
LA PORTE IN 46350

KIM,KIL CHOL AN I34
INDIANA UNIV MED CTR
INDIANAPOLIS IN 46202

KIM,MU SHIN US I74
25 DOUGLAS ST
ST MARGARET HOSP
HAMMOND IN 46320

KIM,YOUNG ROCK OBG I74
8585 BROADWAY
SUITE 670
MERRILLVILLE IN 46410

KIM,YOUNG PTH I74
4321 FIR ST
EAST CHICAGO IN 46312

KIMBROUGH,ROBERT F ORS 082
2730 E STATE BLVD
FORT WAYNE IN 46805

KIMMEL,GEO EDWARD AN 296
458 MARTINS LANE
EVANSVILLE IN 47715

KIMMEL,LOUIS EDMUND GS 230
167 N COUNTY RD 250 WEST
VALPARAISO IN 46383

KINASIEWICZ,LEON E R I74
ST ANTHONY HOSP
CROWN POINT IN 46307

KINCAID,RAYMOND KEITH GP 290
202 S WEST ST
TIPTON IN 46072

KINCAID,RICHARD WESLEY FP 296
611 HARRIET ST SUITE L100
EVANSVILLE IN 47710

KINCAID,ROBT STEPHEN AN 296
7117 E CHERRY
EVANSVILLE IN 47715

KINDELL,HURSCHELL D FP 198
108 E WASHINGTON ST
NEW RICHMOND IN 47967

KING,CHAS ROSS FP 186
1933 CHASE ST
ANDERSON IN 46014

KING,FRANK KARL EM I26
2213 SOUTH DIXON RD
KOKOMO IN 46901

KING,HAROLD TS I34
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

KING,JAY M GS 030
812 NORTH
LOGANSPORT IN 46947

KING,JOHN THOMAS OBG I74
8127 MERRILLVILLE ROAD
MERRILLVILLE IN 46410

KING,JOS P P I34
3231 NORTH MERIDIAN ST NO 21
INDIANAPOLIS IN 46208

KING,JOS WHEELER OTO I86
2101 S JACKSON ST APT 109
ANDERSON IN 46014

KING,LEROY HARRY NEP I34
1633 N CAPITOL AVE # 722
INDIANAPOLIS IN 46202

KING,MICHAEL STEVEN OBG I34
5626 E 16TH ST
INDIANAPOLIS IN 46218

KING,NINA CLEVINGER IM I26
3421 SOUTH LAFOUNTAIN
KOKOMO IN 46901

KING,ROBT D TS I34
I U MEDICAL CENTER
INDIANAPOLIS IN 46202

KING,ROBT PRESTON FP 258
17615 STATE RD 23
SOUTH BEND IN 46635

KING,ROBT W FP I74
13301 LINCOLN PLAZA
CEDAR LAKE IN 46303

KINGMA,ROY ELMER FP 230
DEMOTTE CLINIC
DEMOTTE IN 46310

KINGSBURY,DAVID HOMER D I34
2020 W 86TH ST NO 106
INDIANAPOLIS IN 46260

KINKADE,PAUL TERRENCE GS I22
1015 BROAD ST
NEW CASTLE IN 47362

KINMAN,PHILLIP BRAMMER ORS I62
609 DUBOIS ST
VINCENNES IN 47591

KINO,GEORGE Y PTH I74
540 TYLER ST
GARY IN 46402

KINTNER,BURTON E US 070
236 SIMPSON ST
ELKHART IN 46514

KINZER,LE ROY DE TRUDE FP 318
MARKLE MED CENTER
MARKLE IN 46770

KIRACOFF,GEO ROELAND FP 314
1350 CHESTER BLVD
RICHMOND IN 47374

KIRBY,TED C FP 110
P O BOX 707
GREENFIELD IN 46140

KIRICENKOV,GEORGE F 296
1511 MAIN ST
MOUNT VERNON IN 47620

KIRKHOFF,PAUL JOS PD 134
5430 E 21ST ST
INDIANAPOLIS IN 46218

KIRSHMAN,FORREST EARL FP 062
41 BRIAR RD
MUNCIE IN 47304

KIRSTEN,WALTER T AN 130
P O BOX 163
HUNTINGTON IN 46750

KIRTLEY,JAMES MARION OBG 198
1500 DARLINGTON AVE
CRAWFORDSVILLE IN 47933

KIRTLEY,ROBT WAYNE FP 118
1000 EAST MAIN
DANVILLE IN 46122

KIRTLEY,WM R IM 134
40 NORTH PORT ROYAL DRIVE
HILTON HEAD IS SC 29928

KISSEL,WESLEY ALLEN P 134
1815 N CAPITOL
INDIANAPOLIS IN 46202

KISSINGER,KNIGHT L FP 278
411 E GILMORE ST
ANGOLA IN 46703

KITT,WALTER P 174
7550 HOHMAN AVE
MUNSTER IN 46321

KLAIN,BENJ V FP 134
6434 N COLLEGE AVE
INDIANAPOLIS IN 46220

KLAMER,CHAS H FP 066
715 MAC ARTHUR ST
JASPER IN 47546

KLATCH,BEN Z IM 286
1501 HARTFORD ST
LAFAYETTE IN 47904

KLATTE,EUGENE C R 134
1100 W MICHIGAN STREET
INDIANAPOLIS IN 46202

KLEIFGEN,WM A FP 082
4815 REED ROAD
FORT WAYNE IN 46815

KLEIN,JOHNNY CARL ORS 134
4343 N MERIDIAN ST
INDIANAPOLIS IN 46208

KLEIT,STUART ALLEN NEP 134
INDIANA UNIV MED CTR
1100 W MICH ST-110 FH
INDIANAPOLIS IN 46202

KLEMME,JOHN WM FP 190
530 NORTH MICHIGAN STREET
ARGOS IN 46501

KLEOPFER,RONALD G ORS 082
5050 N CLINTON ST
FORT WAYNE IN 46825

KLEPINGER,HARRY EDWIN FP 286
909 NORTH 21ST ST
LAFAYETTE IN 47904

KLETZING,DANL WAYNE OTO 258
211 N EDDY STREET
SOUTH BEND IN 46617

KLOOZE,KENNETH WARD FP 082
347 WEST BERRY SUITE 417
FORT WAYNE IN 46802

KLUTINOTY,GEO FP 134
1011 WEST 116TH ST
CARMEL IN 46032

KMAK,CHESTER JOHN OBG 174
420 EAST 86TH AVE
MERRILLVILLE IN 46410

KNAPEK,RICHARD MICHAEL ORS 134
3530 SOUTH KEYSTONE AVENUE
INDIANAPOLIS IN 46227

KNIGHT,ERNEST LARRY END 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

KNIGHT,LEWIS W OBG 082
3124 E STATE ST
FORT WAYNE IN 46805

KNOCHEL,WAYNE LEE FP 090
3515 PINE NEEDLE PLACE
WEST LAFAYETTE IN 47906

KNODE,KENNETH THOMSON A 258
626 SHERLAND BLDG
SOUTH BEND IN 46601

KNOTE,JOHN ALTON R 286
RADIOLOGY DEPT HOME HOSPITAL
LAFAYETTE IN 47904

KNOTTS,SLATER R 138
LAKE AND FOREST CLUB
BROWNSTOWN IN 47220

KO,BENNY SIU-PING R 298
1021 SOUTH SIXTH ST
TERRE HAUTE REGIONAL HOSP
TERRE HAUTE IN 47808

KO,RICHARD CHOON BONG FP 062
305 S SYCAMORE
GASTON IN 47342

KOBAK,ALFRED JULIAN OBG 230
1101 E GLENDALE BLVD
VALPARAISO IN 46383

KOBRIN,MEYER WALTER FP 174
9212 BIRCH
MUNSTER IN 46321

KOCH,EDWIN FERDINAND R 062
2401 UNIVERSITY AVE
MUNCIE IN 47303

KOCH,HOWARD W FP 246
700 BROWN ST
WINCHESTER IN 47394

KOENIG,ROBT LOUIS FP 230
1101 GLENDALE
VALPARAISO IN 46383

KOHLSTAEDT,KARL C OM 134
8685 GUILFORD AVE
INDIANAPOLIS IN 46240

KOHLSTAEDT,KENNETH G OS 134
1430 PASEO DE MARCIA
PALM SPRINGS CA 92262

KOHNE,ROBT WM FP 286
3010 UNDERWOOD ST
LAFAYETTE IN 47904

KOLAR,OLDRICH J N 134
1100 W MICHIGAN ST
IND UNIV MED CTR
INDIANAPOLIS IN 46202

KOLETTIS,JOHN GEO FP 174
6111 HARRISON ST
MERRILLVILLE IN 46410

KONKLE,AMY D MC KAY P 134
8402 HARCOURT ROAD
INDIANAPOLIS IN 46260

KONOWITZ,MICHAEL R R 298
318 HICKORY HILL
TERRE HAUTE IN 47802

KOOIKER,JOHN E P 134
1100 NORTH MICHIGAN
N 604 IND UNIV HOSP
INDIANAPOLIS IN 46202

KOONS,KARL M GS 134
5470 E 16TH ST
INDIANAPOLIS IN 46218

KOONTZ,JAMES ARTHUR P 162
2009 JACKSON DR
VINCENNES IN 47591

KOONTZ,WM ALFRED FP 098
334 E MAIN ST
GAS CITY IN 46933

KOPCHA,JOS EDWARDS OBG 174
504 BROADWAY
GARY IN 46402

KOPECKY,ROBT RAY OBG 134
4131 SHELBY ST
INDIANAPOLIS IN 46227

KOPP,WM R GS 186
2101 JACKSON ST STE 105
ANDERSON IN 46014

KORANSKY,DAVID SYDNEY OPH 174
6850 HOHMAN
HAMMOND IN 46324

KORBA,ALVIN TR 296
801 ST MARY'S DRIVE-SUITE 301
EVANSVILLE IN 47715

KORN,ALLAN MICHAEL IM 296
801 ST MARYS DR
EVANSVILLE IN 47715

KORN,JEROME MARTIN FP 174
3290 GRANT ST
GARY IN 46408

KORNAFEL,LADDIE HENRY GS 134
5626 E 16TH
INDIANAPOLIS IN 46218

KOSS,KENNETH WM FP 062
1600 W JACKSON ST
MUNCIE IN 47303

KOTT,ALEXANDER DR 174
7550 S HOHMAN
MUNSTER IN 46321

KOURANY,EDGAR FP 134
1125 N INDIANA AVE
MOORESVILLE IN 46158

KOURANY,OSCAR FP 134
1125 N INDIANA AVE
MOORESVILLE IN 46158

KOVACH,DREW ANTHONY FP 190
530 N MICHIGAN
ARGOS IN 46501

KOWALSKI,EDGAR P FP 070
2323 KENILWORTH DRIVE
ELKHART IN 46514

KRABILL,WILLARD S PH 070
120 CARTER RD
GOSHEN IN 46526

KRAFT,BENNETT A 134
1436 JOHN RINGLEY PKWY
SARASOTA FL 33577

KRANING,KENNETH KLAIRE FP 090
KRANING CLINIC
KEWANNA IN 46939

KRAUS,MAURICE D R 286
2600 GREENBUSH ST
ARNETT CLINIC
LAFAYETTE IN 47904

KRAUSE,FRIEORICH FP 070
23918 US 33 EAST
ELKHART IN 46514

KREITL,OOROTHY M REEVES P 314
RICHMOND STATE HOSP
RICHMONO IN 47374

KREMERS,GEO ADAM U 126
400 S BERKLEY RO STE C
KOKOMO IN 46901

KREMZAR,MAX 296
3700 WASHINGTON AVE
ST MARYS HOSP MED CENTER
EVANSVILLE IN 47750

KRESLER,LEON E FP 204
326 E HOLLEY OR
KENTLAND IN 47951

KRESS,JAMES WALTER GS 062
912 W MC GALLIARO
MUNCIE IN 47303

KRIEBLE,WM WYMONO IM 298
221 S 6TH ST
TERRE HAUTE IN 47801

KRIEL,WM B FP 134
5630 W WASHINGTON ST
INOIANAPOLIS IN 46241

KRISHNA,OEV B N GS 174
504 E 86TH AVE
MERRILLVILLE IN 46410

KRIZMAN,OAVIO JOHN AN 258
53100 PLACIO OR
SOUTH BEND IN 46637

KROCZEK,STEPHEN ERIC OPH 178
1225 E COOLSPRING
MICHIGAN CITY IN 46360

KROH,CASEY IM 062
200 NORTH COLE STREET
MUNCIE IN 47303

KRSEK,ARCHIE JOHN FP 174
10 N MICHIGAN ST
HOBART IN 46342

KRUEGER,BARBARA J JACOBS R 130
1317 POPLAR ST
HUNTINGTON IN 46750

KRUEGER,JOHN EDWARO AN 258
1146 DUNROBBIN LANE
SOUTH BEND IN 46614

KRUEGER,JOHN EUGENE FP 082
5717 S ANTHONY BLVD
FORT WAYNE IN 46806

KRUEGER,ROBT B FP 014
2739 CENTRAL AVE
COLUMBUS IN 47201

KRUEGER,THOS PAUL NS 296
611 HARRIET ST STE 301
EVANSVILLE IN 47710

KRYSZEK,STANLEY HENRY OM 134
1919 N CAPITOL AVE
INOIANAPOLIS IN 46202

KU,MARSHALL JU-CHUAN PD 230
802 LAPORTE AVE
VALPARAISO IN 46383

KUBIK,FRANCIS JOS ABS 178
902 PINE ST
MICHIGAN CITY IN 46360

KUBLEY,JAMES DANL FP 190
304 NORTH WALNUT ST
PLYMOUTH IN 46563

KUBLEY,JAMES DUANE FP 190
304 N WALNUT ST
PLYMOUTH IN 46563

KUOELE,LOUIS THOS AN 174
1700 DAVIS AVE
WHITING IN 46394

KUHN,ARTHUR J OTO 174
7905 CALUMET AVE
MUNSTER IN 46321

KUHN,FREDERICK LEE OM 258
P O BOX 2497
SOUTH BEND IN 46680

KUHN,ROBT WOODROW FP 110
R R # 1
WILKINSON IN 46186

KUIPERS,FRED MERRILL CD 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

KULSAKDINUN,CHAIRAT PD 174
6111 HARRISON ST
MERRILLVILLE IN 46410

KUNKLER,ARNOLD W GS 298
1700 N 7TH ST
TERRE HAUTE IN 47804

KUNKLER,WM CHAS GS 298
1119 SOUTH CENTER ST
TERRE HAUTE IN 47802

KUNTZ,HERMAN WM OTO 134
5317 E 16TH ST NO 7
INOIANAPOLIS IN 46218

KURLANOER,GERALO JAY R 134
7917 SPRING MILL ROAO
INOIANAPOLIS IN 46260

KURTZ,PHILIP LOUIS IM 134
1230 KINGS COVE COURT
INOIANAPOLIS IN 46260

KURTZ,RICHARD OTO 134
3351 N MERIOIAN
INDIANAPOLIS IN 46208

KURTZ,ROBERT S FP 290
202 SW ST
TIPTON IN 46072

KUYKENDALL,GERALD LEE — IM — 298
400 EIGHTH AVE
TERRE HAUTE IN 47804

KWAK,IL S — AN — 166
4409 REDSTONE CT
FORT WAYNE IN 46815

KWITNY,ISADORE JACOB — IM — 134
2206 BOSTON CT NO A
INDIANAPOLIS IN 46208

KYLE,TERRY J — IM — 254
640 E 11TH
RUSHVILLE IN 46173

LA DINE,CLARENCE B — FP — 134
5417 N MERIDIAN
INDIANAPOLIS IN 46208

LA FOLLETTE,FORREST R — FP — 174
2450 169TH ST
HAMMOND IN 46323

LA FOLLETTE,JAMES WARREN — FP — 214
839 AUTO MALL RD
BLOOMINGTON IN 47401

LA FOLLETTE,ROBT E — FP — 078
2515 GLENWOOD PARK
NEW ALBANY IN 47150

LA SALLE,RICHARD MAHLON — FP — 302
645 N SPRING ST
WABASH IN 46992

LA SALLE,ROBT M — FP — 302
1025 MANCHESTER AVE
WABASH IN 46992

LA SALLE,WILLIAM B — ORS — 082
5050 N CLINTON ST
FORT WAYNE IN 46825

LABITAN,CESAR CANONIGO — EM — 174
1031 AZALEA DRIVE
MUNSTER IN 46321

LACERA,DONALDO E — PTH — 174
ST MARGARET HOSP DEPT-PTH
HAMMOND IN 46320

LADIG,DONALD STEES — FP — 082
2720 FAIRFIELD
FORT WAYNE IN 46807

LAGOS,DIOSDADO OGA-OGA — GS — 014
R R NO 11 BOX 62-O
COLUMBUS IN 47201

LAHR,RICHARD E — FP — 286
PURDUE STUDENT HOSP
WEST LAFAYETTE IN 47906

LAI,EDWARD MING-CHE — PTH — 298
P O BOX 1468
1505 N 7TH ST
TERRE HAUTE IN 47803

LAI,NAN YER — OBG — 230
840 LINCOLNWAY
VALPARAISO IN 46383

LAKE,MARJORIE E BAURLEY — PD — 202
19 WEST WASHINGTON ST
MARTINSVILLE IN 46151

LAKER,GENE CARROLL — FP — 082
2407 FAIR OAK DR
FORT WAYNE IN 46809

LAKER,RICHARD JOHN — FP — 082
2407 FAIROAK
FORT WAYNE IN 46809

LALANI,ABDUL SULTAN — OTO — 178
425 WEST 8TH ST
YUMA AZ 85364

LAMB,EMMETT B — GS — 134
3120 N MERIDIAN ST
INDIANAPOLIS IN 46208

LAMB,FRED KELLEY — N — 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

LAMB,J LEONARD — OBG — 258
WESTWOOD SUBDIVISION
104 OHIO ST
WHITESBURG KY 41858

LAMB,RUSSELL WALTER — OM — 134
3120 N MERIDIAN ST
INDIANAPOLIS IN 46208

LAMBER,CHET KELLER — GS — 134
400 BOARD OF TRADE BLDG
INDIANAPOLIS IN 46204

LAMBERT,DESTRY WAYNE — IM — 290
DOCTORS PARK R R NO 4
TIPTON IN 46072

LAMKIN,EUGENE HENRY — IM — 134
1935 N CAPITOL
INDIANAPOLIS IN 46202

LAMPE,ELFRED H — OBG — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

LANCET,ROBT ORVILLE — FP — 298
221 S 6TH
TERRE HAUTE IN 47801

LAND,RICHARD NELSON — R — 186
1933 CHASE STREET
ANDERSON IN 46014

LANDGRAF,JOHN WM — PTH — 258
531 NORTH MAIN ST
DEPARTMENT OF PATHOLOGY
SOUTH BEND IN 46601

LANDIS,CHAS BYRON — OM — 286
505 S 7TH ST
LAFAYETTE IN 47901

LANDS,ROBT MASON — FP — 230
3820 CENTRAL AVE
SUITE 4
LAKE STATION IN 46405

LANDWEHR,ALFONS PUD 134
5217 LEONE PL
INDIANAPOLIS IN 46226

LANE,C ELAINE LASHLEY IM 134
2840 N HIGH SCHOOL RD
SPEEDWAY IN 46224

LANE,WM HENRY AN 258
1051 BARBERRY LN
SOUTH BEND IN 46619

LANG,JAY WM AN 134
5435 EMERSON WAY N #115
INDIANAPOLIS IN 46226

LANGSTON,EDWARD LEE FP 026
203 N DIVISION
FLORA IN 46929

LANMAN,JOHN U IM 174
716 SEBERGER
MUNSTER IN 46321

LANNING,ROSCOE A FP 106
998 NORTH DR
NOBLESVILLE IN 46060

LAPP,MICHAEL ERWIN CD 134
3266 N MERIDAN
INDIANAPOLIS IN 46208

LARDIZABAL,JOSE MARQUEZ FP 102
P O BOX 463
BLOOMFIELD IN 47424

LARGAESPADA,MANUEL GS 134
549 S FLEMING
INDIANAPOLIS IN 46241

LARKIN,GREGORY NEIL US 242
600 NORTH ARLINGTON ST
GREENCASTLE IN 46135

LARMORE,JOS LOWMAN OPH 186
612 ANDERSON BANK BLDG
ANDERSON IN 46016

LARMORE,ROBERT HUGHEL OPH 082
2828 S FAIRFIELD AVE
FORT WAYNE IN 46807

LARSON,ARTHUR NORMAN GS 130
1159 ETNA AVE
HUNTINGTON IN 46750

LARSON,DAVID ERIC PD 014
2420 7TH ST
COLUMBUS IN 47201

LARSON,MICHAEL S P 174
7905 CALUMET
MUNSTER IN 46321

LASHMET,MICHAEL H 134
512 BOARD OF TRADE BUILDING
INDIANAPOLIS IN 46204

LASICH,ANTHONY R ORS 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

LAUBSCHER,CLARENCE A FP 296
1201 LAUBSCHER RD
EVANSVILLE IN 47710

LAUDEMAN,WALTER A FP 186
1515 N A ST
ELWOOD IN 46036

LAUER,DONALD HERBERT FP 134
P O BOX 435
GREENWOOD IN 46142

LAUTZ,HERBERT A OTO 174
7905 CALUMET AVE
MUNSTER IN 46321

LAUTZENHEISER,RICHARD L RHU 134
SUITE 313
8330 NAAB ROAD
INDIANAPOLIS IN 46260

LAVALLO,FRANK J 074
STATE ROAD 1
FORD AEROSPACE & COMM CORP
CONNERSVILLE IN 47331

LAVELLE,THOS FRANCIS PUD 258
720 EAST CEDAR ST NO 260
SOUTH BEND IN 46617

LAW,YU HONG GS 230
R R 6 BOX 220
VALPARAISO IN 46383

LAWLER,JOHN FIELDING GS 296
421 CHESTNUT ST
EVANSVILLE IN 47713

LAWRENCE,JAMES MELTON OPH 134
2020 W 86TH ST SUITE 200
INDIANAPOLIS IN 46260

LAWRENCE,JOSEPH C ORS 296
611 HARRIET ST
EVANSVILLE IN 47710

LAWSON,ALLAN JOHN PD 134
2020 W 86TH ST
INDIANAPOLIS IN 46260

LAWSON,LAWRENCE JOS GS 062
2108 WEST MC GALLIARD ROAD
MUNCIE IN 47304

LAWTON,DENNIS FREDERICK FP 062
400 WHITE RIVER BLVD
MUNCIE IN 47303

LAZZARA,JOS VINCENT PD 162
514 SOUTH 9TH ST
VINCENNES IN 47591

LE BEAU,THOMAS E FP 250
4965 W ST CHARLES PLACE
LAKE CHARLES LA 70605

LEAHEY,JEROME MARTIN FP 246
R R 2
UNION CITY IN 47390

LEAHY,HOWARD JOS FP 186
P O BOX 150
PENDLETON IN 46064

LEAK,ROBT H FP 018

BOSWELL IN 47921

LEATHERMAN,HARTER L OS 134
4940 ALLISONVILLE RD NO B
INDIANAPOLIS IN 46205

LEBIODA,HENRY STANLEY FP 174
230 MORINGSIDE
GARY IN 46408

LEE,ALMON SEEMAN IM 174
9147 ELMWOOD DR
MUNSTER IN 46321

LEE,CHONG SUNG OBG 278
909 WEST MAUMEE STREET
ANGOLA IN 46703

LEE,DANG-TZUOH OBG 174
414 E 86TH ST
MERRILLVILLE IN 46410

LEE,DOMINGO KING PM 134
6531 YELLOWSTONE PKWY
INDIANAPOLIS IN 46217

LEE,HYUNG SOO GS 010
227 S 2ND ST
DECATUR IN 46733

LEE,LORIN LESLIE OBG 134
3530 S KEYSTONE SUITE 111
INDIANAPOLIS IN 46227

LEE,MU-RONG OBG 174
12110 GRANT ST
CROWN POINT IN 46307

LEE,RANDALL A IM 202
60 WEST MORGAN ST
MARTINSVILLE IN 46151

LEE,RICHARD V OS 214
621 HERITAGE
ELLETTSVILLE IN 47429

LEE,ROBT YING FP 230
808 E LINCOLNWAY
VALPARAISO IN 46383

LEEDY,DONALD KA PD 134
3500 LAFAYETTE RD
INDIANAPOLIS IN 46222

LEFFEL,JAMES M GS 134
R R 3 BOX 111
ZIONSVILLE IN 46077

LEFFLER,WM T FP 134
2141 E 52D ST
INDIANAPOLIS IN 46205

LEGA,ROBT EUGENE PD 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

LEHMAN,EVAN LYNN OBG 134
2020 W 86TH ST
INDIANAPOLIS IN 46260

LEHMAN,KENNETH MAX FP 170

TOPEKA IN 46571

LEHMANN,DALE ELBERT END 296
8830 WHETSTONE RD
EVANSVILLE IN 47711

LEHMBERG,OTTO F C FP 326
118 E VAN BUREN ST
COLUMBIA CITY IN 46725

LEIBUNDGUTH,HENRY ORS 296
P O BOX 5166
EVANSVILLE IN 47715

LEINBACH,EARL R FP 274

HAMLET IN 46532

LEIPHART,CHAS JOS R 062
2401 UNIVERSITY AVE
MUNCIE IN 47303

LEIPOLD,JON DAVID P 258
634 NORTH LAFAYETTE
SOUTH BEND IN 46601

LEMAN,EUGENE R 174
6111 HARRISON ST
MERRILLVILLE IN 46410

LEMPKE,LLOYD WM ORS 286
1501 HARTFORD ST STE I
LAFAYETTE IN 47904

LENK,GEO GUSTAVE OM 082
1805 E WASHINGTON BLVD
FORT WAYNE IN 46803

LENOX,JACK LEONARD FP 022
1202 N LEBANON
LEBANON IN 46052

LENTINI,NINO RUDOLPH ORS 122
3815 S MAIN STREET
NEW CASTLE IN 47362

LENTZ,WM CHAS D 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

LENYO,LUDIMERE IM 298
2100 N CENTER
TERRE HAUTE IN 47804

LEON,MARIO FP 066
721 W 13TH ST
JASPER IN 47546

LEONARD,DALE FORREST FP 314
449 E MAIN ST
HAGERSTOWN IN 47346

LESER,RALPH ULRICH IM 134
3901 N MERIDIAN ST
INDIANAPOLIS IN 46208

LESHNOWER,ALAN C GS I34
1213 N ARLINGTON
INDIANAPOLIS IN 46219

LESSURE,ALFRED P R 296
401 S E 6TH STREET
EVANSVILLE IN 47713

LETT,E BRISCOE FP 046
404 JOHN F KENNEDY AVE
LOOGOOTEE IN 47553

LEVATIN,BERNARD I U 258
919 E JEFFERSON ST
SOUTH BEND IN 46622

LEVI,LEON IM 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

LEVIN,HARVEY JOS GS I74
2450-169TH ST
HAMMOND IN 46323

LEVIN,MARC A NS I74
30 DOUGLAS ST
HAMMOND IN 46320

LEWALLEN,STEVEN ISAAC FP 214
1970 EAST THIRD ST
BLOOMINGTON IN 47401

LEWIS,GEO NORWOOD IM 214
3937 ROLL AVE
BLOOMINGTON IN 47401

LEWIS,JAMES RICHARD IM 314
1200 CHESTER BLVD
RICHMOND IN 47374

LEWIS,LUCIEN A PD 174
2200 GRANT ST
GARY IN 46404

LEWIS,MERRAL B FP 296
350 WEST COLUMBIA ST
EVANSVILLE IN 47710

LEWIS,PAUL STANLEY FP 134
6357 ROCKVILLE RD
INDIANAPOLIS IN 46224

LEWIS,R EARL OS I34
112 S RIDGE UPIU
INDIANAPOLIS IN 46219

LEY,GLEN DAVID IM 214
400 E 3RD ST
BLOOMINGTON IN 47401

LEY,LARRY J U 314
100 NORTH 15TH ST
RICHMOND IN 47374

LIBUNAO,ARTEMIO SANTOS FP 250
RFD-2
VERSAILLES IN 47042

LIDDELL,CHAS KEALLY GS 178
1225 E COOLSPRING
MICHIGAN CITY IN 46360

LIDIKAY,EDWARD C OBG I34
5506 E 16TH STREET
INDIANAPOLIS IN 46218

LIEBNER,MICHAEL S D30
TWO CHASE PARK
ASSOCIATED RADIOLOGISTS INC
LOGANSPORT IN 46947

LIEBSCHUTZ,NORMAN HELFT PD 134
652 NORTH GIRLS SCHOOL RD
INDIANAPOLIS IN 46224

LIFE,HOMER LAWRENCE GS I22
7672 COVE TERRACE
SARASOTA FL 33581

LILAGAN,FLORENTINO RAMOS GS 174
20600 ARCADEAN DR
OLYMPIA FIELDS IL 60461

LIM,NUNILON CARRANZA IM I86
1847 EAST 8TH ST APT I
ANDERSON IN 46012

LIM,YOUNG S PTH 296
9933 PETERSBURG RD
EVANSVILLE IN 47711

LIMCACO,OSCAR GARCIA NS 298
3001 POPLAR ST
TERRE HAUTE IN 47803

LIN,SHOU-GEM GS 174
6111 HARRISON ST
MERRILLVILLE IN 46410

LIN,YNG CHERNG GS I66
422 S BUFFALO ST
WARSAW IN 46580

LIND,JAAP J ORS 286
2600 GREENBUSH
LAFAYETTE IN 47901

LINDENBORG,PAUL GUSTAV FP 134
6431 CREEKSIDE LN
INDIANAPOLIS IN 46220

LINDERMAN,RICHARD B GS 134
8220 NAAB ROAD
INDIANAPOLIS IN 46260

LINDGREN,IVAN THURE FP D50
223 MECHANIC ST
AURORA IN 47001

LINDSAY,HAMLIN BERRY GS 046
511 E MAIN
WASHINGTON IN 47501

LINDSETH,RICHARD E ORS 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46208

LINDSEY,ROBERT LEE AN 214
49 LA SALLES WOODS
2250 EAST POINTE E ROAD
BLOOMINGTON IN 47401

LING,JOHN FRANCIS IM 314
6 PARKWAY LANE
RICHMOND IN 47374

LINGE,CARL HARBOURT OR 296
401 S E 6TH ST
EVANSVILLE IN 47713

LINGEMAN,RALEIGH E OTO 134
1100 W MICHIGAN RM 56-A
INDIANAPOLIS IN 46202

LINK,CHAS WM FP 158
365 E MAIN ST
GREENWOOD IN 46142

LINK,GOETHE GS 134
BROOKLYN IN 46111

LINK,WM C FP 214
314 W 1ST ST
BLOOMINGTON IN 47401

LINSON,JOHN CARMEN FP 138
205 N PINE ST
SEYMOUR IN 47274

LIONBERGER,JOHN R R 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

LIPP,STEVEN R PD 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

LIPSEY,ALFRED JOS R 174
7550 HOHMAN AVE
MUNSTER IN 46321

LIPSON,JOHN DAVID GS 014
2530 SANDCREST BLVD
COLUMBUS IN 47201

LISS,EMANUEL C D 258
119 S EDDY ST
SOUTH BEND IN 46617

LITTLEFIELD,PAUL ARTHUR AN 134
1815 N CAPITOL AVE APT 301
INDIANAPOLIS IN 46202

LITTLEFIELD,SHIRLEY D AN 134
4040 CROOKED CREEK OVERLOOK
INDIANAPOLIS IN 46208

LITZENBERGER,SAM W U 186
23 WONSON ST
GLOUCESTER MA 01930

LIVINGSTON,PETER HOWARD U 182
1775 SADDLER DRIVE
BEDFORD IN 47421

LLOYD,FRANK P GS 134
METHODIST HOSP
INDIANAPOLIS IN 46202

LLOYD,JOE REID US 106
107 JOHN ST
NOBLESVILLE IN 46060

LLOYD,ROBT PAUL GS 082
723 FULTON ST
FORT WAYNE IN 46802

LO SASSO,ALVIN M AN 134
I U MED CENTER
INDIANAPOLIS IN 46202

LOCKE,ROBT ALLEN AN 134
5943 HOOVER RD
INDIANAPOLIS IN 46208

LOCKHART,JACK MACK FP 074
707 W 3RD ST
CONNERSVILLE IN 47331

LOCKHART,PHILIP BRUCE R 258
P O BOX 4016
SOUTH BEND IN 46624

LODDE,MARVIN BERNARD AN 126
4200 MILLERWOOD DR
KOKOMO IN 46901

LOEWENSTEIN,WERNER L FP 298
300 COLLEGE AVE
TERRE HAUTE IN 47802

LOGAN,JAMES ZIMMERMAN ABS 314
1030 N J
RICHMOND IN 47374

LOGAN,PATRICK CLIFFORD D 134
1910 NORTH ARLINGTON
INDIANAPOLIS IN 46218

LOGAN,RICHARD S D 082
3124 E STATE ST
FORT WAYNE IN 46805

LOH,HWEI-YA CHANG PTH 174
252 MORNINGSIDE AVE
GARY IN 46408

LOH,JEROME WEI-PING PTH 174
600 GRANT ST
GARY IN 46402

LOHEIDE,STEPHEN ROBT PD 014
2420 7TH ST
COLUMBUS IN 47201

LOHMAN,ROBT M FP 082
4017 S WAYNE AVE
FORT WAYNE IN 46807

LOHMULLER,HERBERT W IM 318
303 S MAIN ST
BLUFFTON IN 46714

LOHOFF,LEWIS C FP 222
PROFESSIONAL BLD
TELL CITY IN 47586

LONA,MARCO ANTONIO IM 174
3619 MAIN ST
EAST CHICAGO IN 46312

LONG,MALCOLM DARRELL R 118
R R 1 BOX 342
WESTFIELD IN 46074

LONG,MAX RICHARD FP 098
803 S BOOTS ST
MARION IN 46952

LONG,PAUL LAPPLE FP 186
828 DRESSER DR
ANDERSON IN 46011

LONGSHORE,ROBT EUGENE AN 126
111 RUE DE MAISON
KOKOMO IN 46901

LONGSTAFF,JOHN PASCHAL P 296
715 FIRST AVE
EVANSVILLE IN 47710

LOOMIS,CHAS HENRY GS 314
1030 N J ST
RICHMOND IN 47374

LOOP,FREDERICK ADDISON GS 286
296 PARK LANE
WEST LAFAYETTE IN 47906

LOPEZ,ALFONSO ESCOBAR FP 146
717 WEST HIGH ST BOX 1085
PORTLAND IN 47371

LOPEZ,EFREN RAUL AN 162
502 AMERICAN BANK BLDG
VINCENNES IN 47591

LOPEZ,FILEMON PASION FP 174
2167 GETTLER ST
DYER IN 46311

LOPEZ,SANTIAGO A OBG 174
8127 MERRILLVILLE ROAD
MERRILLVILLE IN 46410

LORBER,ARTHUR ORS 134
1915 NORTH CAPITOL STREET
INDIANAPOLIS IN 46802

LORBER,JAMES MICHAEL GS 266
1604 EAST STATE RD 44
SHELBYVILLE IN 46176

LORD,GLENN CLOVIS FP 134
7437 HOLIDAY DR W
INDIANAPOLIS IN 46260

LORD,THOS JOS CD 134
8402 HARCOURT RD 113
INDIANAPOLIS IN 46260

LOUCK,MICHAEL FP 142
828 W WASHINGTON AVE
RENSSELAER IN 47978

LOUDEN,ROBT W FP 134
1221 E 86TH ST
INDIANAPOLIS IN 46240

LOURIE,BERNARD IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

LOVALL,LARRY D FP 118
202 MEADOW DR
DANVILLE IN 46122

LOVE,GEO NEWTON AN 134
5331 WASHINGTON BLVD
INDIANAPOLIS IN 46220

LOVE,JOHN WM P 150
1441 MAPLEWOOD
MADISON IN 47250

LOVE,VINCENT LOGAN OM 082
1300 SOUTH CLINTON ST
FORT WAYNE IN 46802

LOVELL,MARTIN HUTSON FP 174
120 W 25TH AVE
GARY IN 46407

LOVETT,HARVEY D FP 022
INDPLS CHRYSLER FOUNDRY
INDIANAPOLIS IN 46241

LOVING,JURY BAKER FP 298
NEW GOSHEN IN 47863

LOWE,DANIEL KINGSLEY GS 134
DEPT OF SURGERY
1001 WEST 10TH
INDIANAPOLIS IN 46202

LOWE,JOHN CHARLES IM 134
1303 N ARLINGTON AVE
INDIANAPOLIS IN 46219

LOWES,DONALD RAY OTO 134
3530 S KEYSTONE
INDIANAPOLIS IN 46227

LOZOW,DAVID ORS 134
5626 E 16TH ST
INDIANAPOLIS IN 46218

LUCAS,CLARENCE A FP 134
2012 BOULEVARD PL
INDIANAPOLIS IN 46202

LUCAS,JOHN THOMAS CLP 082
3024 FAIRFIELD AVE
FORT WAYNE IN 46807

LUCAS,OWEN HERBERT FP 230
700 SOUTH CALUMET
CHESTERTON IN 46304

LUCE,JOHN WEBB OBG 178
1225 E COOLSPRING AVE
MICHIGAN CITY IN 46360

LUCKEY,JAMES EDWARD AN 082
3 RIVERS NORTH STE 105
FORT WAYNE IN 46802

LUDWIG,JEROME J U 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

LUDWIG,PAUL EDWARD OPH 198
408 W MARKET ST
CRAWFORDSVILLE IN 47933

LUGINBILL,HOWARD M P 134
1303 N ARLINGTON AVE-STE 6
INDIANAPOLIS IN 46219

LUK,PETER PTH 174
1726 MANSARD BLVD
GRIFFITH IN 46319

LUKEMEYER,GEO T IM 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

LUKEMEYER,ST JOHN FP 066
109 W 12TH ST
JASPER IN 47546

LUKINS,JAMES D FP 310
304 EAST MARKET ST
SALEM IN 47167

LUNA,MANUEL R OBG 174
110 RIDGE RD
MUNSTER IN 46321

LUNDEBERG,RALPH ALVIN FP 174
1609 JULIE DRIVE
SCHERERVILLE IN 46375

LUNDT,MILO OLIVER U 070
330 W LEXINGTON
ELKHART IN 46514

LUNSFORD,THOS EUGENE N 134
2020 W 86TH ST
INDIANAPOLIS IN 46260

LUROS,JOHN THEODORE US 134
1815 N CAPITOL AVE STE 510
INDIANAPOLIS IN 46202

LUTHER,WM C EM 070
3006 EAST LAKE DR S
ELKHART IN 46514

LUTZ,ANDREAS OBG 174
8136 KENNEDY AVE
HIGHLAND IN 46322

LUTZ,GEORGIANNA FP 174
504 BROADWAY
GARY IN 46402

LUTZ,LARRY WM FP 296
1825 NORTH MEADOW ROAD
EVANSVILLE IN 47715

LUXENBERG,EDWIN RALPH PD 030
8 CHASE PARK
LOGANSPORT IN 46947

LUZADDER,JOHN E FP 258
2113 LAKE SHORE DR L B
MICHIGAN CITY IN 46360

LUZIETTI,RICHARD GILBERT IM 318
303 SOUTH MAIN ST
BLUFFTON IN 46714

LY,LILY ANN U H FP 146
504 W ARCH ST
PORTLAND IN 47371

LYBROOK,WM B EM 134
3004 E 52ND ST
INDIANAPOLIS IN 46205

LYNCH,HAROLD DUFF HEM 296
P O BOX 27
MOUNT VERNON IN 47620

LYNN,GENE EDISON P 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

LYON,WM COCHRAN P 082
MENTAL HEALTH CENTER
909 E STATE BLVD
FORT WAYNE IN 46805

LYONS,CHAS ROGER US 302
WABASH CLINIC
WABASH IN 46992

LYTWAKIWSKY,ANATOL PM 174
809 126TH COURT
CROWN POINT IN 46307

MABEL,THOS ARTHUR FP 106
110 LAKEVIEW AVE
NOBLESVILLE IN 46060

MAC DONELL,ELDRED HUGH IM 258
211 N EDDY
SOUTH BEND IN 46617

MAC DOUGALL,JOHN D TS 134
1500 ALBANY ST SUITE 702
BEECH GROVE IN 46107

MAC LENNAN,JOHN CALVIN CD 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

MAC WILLIAMS,ROBT HAMILL OM 134
320 NORTH MERIDIAN ST
INDIANAPOLIS IN 46204

MACATANGAY,EDELINO L FP 214
5080 WEST ALDRIN CT
BLOOMINGTON IN 47401

MACHLEDT,JOHN HENDRIX FP 158
243 S MADISON ST
GREENWOOD IN 46142

MACIAS,RAFAEL CDS 258
2208 AMER NAT'L BANK BLDG
SOUTH BEND IN 46601

MACKEL,DAVID F ORS 082
2730 EAST STATE BLVD
FORT WAYNE IN 46805

MACKEL,FREDERICK O ORS 082
2609 FAIRFIELD AVE
FORT WAYNE IN 46807

MACKEL,JERRY L ORS 082
2609 FAIRFIELD AVE
FORT WAYNE IN 46807

MACKENZIE,VERONICA R 134
4617 EAST 46TH ST
INDIANAPOLIS IN 46226

MACKEY,JOHN EDWARD OBG 134
940 W 58TH ST
INDIANAPOLIS IN 46208

MACRI,PAUL ANGELO CARL FP 258
427 LINCOLN WAY EAST
MISHAWAKA IN 46544

MACY,GEO WEBSTER GS 014
5440-25TH ST
COLUMBUS IN 47201

MACY,WARREN LEE US 242
600 NORTH ARLINGTON
GREENCASTLE IN 46135

MADARANG,NAPOLEON M FP 174
2450 169TH ST
HAMMOND IN 46323

MADDEN,ROBT JOHN AN 134
383 LEISURE LANE
GREENWOOD IN 46142

MADER,JOHN H IM 314
1200 CHESTER BLVD
RICHMOND IN 47374

MADER,JON TERRY ID 314
DEPT OF INTERNAL MEDICINE
UNIV OF TEXAS MEDICAL BRANCH
GALVESTON TX 77550

MADLANG,RODOLFO M U 174
513 RIDGE RD
MUNSTER IN 46321

MADRILEJO,NORA GUEVARA AN 174
4102 SLEIGHBELL LANE
VALPARAISO IN 46383

MADRILEJO,ROBERTO B OM 174
4102 SLEIGHBELL LANE
VALPARAISO IN 46383

MADTSON,ALFRED R GS 134
1815 N CAPITOL ROOM 307
INDIANAPOLIS IN 46202

MADURA,JAMES ANTHONY GS 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

MAGBAG,WENCESLAO G FP 066
LIN ST CORNER OF 5TH AVE
HOLLAND IN 47541

MAGLINTE,DEAN D T OS 134
1433 BREWSTER RD
INDIANAPOLIS IN 46260

MAGNO,JOSE NOCUM P 098
V A HOSPITAL
MARION IN 46952

MAGNUSON,CHAS W GE 258
211 EDDY AT COLFAX
SOUTH BEND IN 46617

MAHANK,CAMIEL CYRIEL OBG 258
303 S MAIN ST
MISHAWAKA IN 46544

MAIER,PAUL T CD 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

MAJMUDAR,DEEPAK MADANLAL OBG 174
7550 HOHMAN AVE
MUNSTER IN 46321

MAKOVSKY,THEODORE FP 230
2102 E EVANS AVE
VALPARAISO IN 46383

MALACHOWSKI,ROBT MICHAEL PD 134
6314 N RUCKER
INDIANAPOLIS IN 46220

MALAYTER,JAMES A ORS 230
2501 CUMBERLAND DR
VALPARAISO IN 46383

MALDIA,GODOFREDO MAYUGA ON 082
3030 LAKE AVE
FORT WAYNE IN 46805

MALIK,MUHAMMAD IQBAL PTH 134
WINONA HOSP PATH DEPT
3232 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

MALONE,LEANDER ALONZO R 298
2511 NORTH NINTH ST
TERRE HAUTE IN 47804

MALONEY,CHARLES D PS 134
8330 NAAB ROAD
INDIANAPOLIS IN 46260

MALOTT,FREDRICK R FP 098
CONVERSE IN 46919

MALOUF,STEPHEN DAVID OS 194
P O BOX 3111
BLOOMINGTON IL 61701

MAMARIL,BLAS FLORES FP 030
3715 HENRY DRIVE
LOGANSPORT IN 46947

MAMMEN,HAROLD W OM 134
P O BOX 388
INDIANAPOLIS IN 46206

MANALO,FRANCISCO SARENAS AN 098
801 JEFFRAS AVE
MARION IN 46952

MANDEL,DARREL SHELDON R 134
8315 CLARIDGE RD
INDIANAPOLIS IN 46260

MANDELBAUM,ISIDORE TS 134
INDIANA UNIV MED CTR
INDIANAPOLIS IN 46202

MANDERS,KARL L NS 134
5506 E 16TH ST
SUITE 24
INDIANAPOLIS IN 46218

MANGAHAS,JOVENCIO P FP 174
7441 ARKANSAS
HAMMOND IN 46323

MANGAHAS,VIOLETA RIVERA AN 174
7441 ARKANSAS AVE
HAMMOND IN 46323

MANHART,DOYLE BASLER FP 106
501 E 5TH ST
SHERIDAN IN 46069

MANIFOLD,HAROLD MORRIS FP 214
1920 E 3RD ST
BLOOMINGTON IN 47401

MANION,MARLOW WM OTO 134
5132 N NEW JERSEY ST
INDIANAPOLIS IN 46205

MANKIN,WM J OPH 298
1655 N 7TH ST
TERRE HAUTE IN 47801

MANLEY,FLOYD FP 174
6010 COLUMBIA AVE
HAMMOND IN 46320

MANN,MORTIMER OPH 134
3266 N MERIDIAN APT 401
INDIANAPOLIS IN 46208

MANN,RICHARD EUGENE P 082
1405 NORTH ANTHONY BLVD
FORT WAYNE IN 46805

MANNING,GEO C NS 082
534 W BERRY ST
FORT WAYNE IN 46802

MANNING,GEO WESTON CHP 296
1909 LOVEJOY LANE
COLUMBIA MO 65201

MANNING,K RANDOLPH ORS 134
1815 NORTH CAPITOL AVE
INDIANAPOLIS IN 46202

MANNION,ROONEY ANTHONY U 178
FOX VILLAGE MED BLDG
LA PORTE IN 46350

MANSHIP,CECIL STANLEY FP 310
BOX 118
HARDINSBURG IN 47125

MANSUETO,MARIO DANL HNS 174
509 RIDGE RD
MUNSTER IN 46321

MANZANARES,AUSTACIO F AN 298
2920 OHIO BLVD
TERRE HAUTE IN 47803

MANZANO,EDMUNDO V AN 174
9513 DOGWOOD LN
MUNSTER IN 46321

MANZIE,MICHAEL WM ABS 134
9040 ASHWORTH CT
INDIANAPOLIS IN 46260

MARCHAND,EDWIN VICTOR FP 094
5700 WARD ROAD
EVANSVILLE IN 47711

MARCUS,MORRIS C OTO 174
3229 BROADWAY
GARY IN 46409

MARHENKE,JON DAVID P 134
1815 NORTH CAPITOL AVE NO 202
INDIANAPOLIS IN 46202

MARIANO,ARTURO S OBG 158
46 STONEGATE DR
INDIANAPOLIS IN 46227

MARIENAU,DAVID J FP 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

MARK,GEO ARTHUR IM 070
BOX 1005
ELKHART IN 46514

MARKS,HOWARD HARLEY FP 130
1120 N JEFFERSON ST
HUNTINGTON IN 46750

MARKS,JOHN SCOTT NS 134
5506 E 16TH ST
SUITE 24
INDIANAPOLIS IN 46218

MARKS,NORMAN S U 286
SUITE 712
PURDUE NATIONAL BANK BLDG
LAFAYETTE IN 47901

MARKS,ORA LEONARD OBG 174
815 W CHICAGO AVE
EAST CHICAGO IN 46312

MARKS,SALVO PHILIP OPH 174
8320 PARKVIEW AVE
MUNSTER IN 46321

MARKSTONE,DAVID HAROLD OPH 134
1100 WEST MICHIGAN
INDIANAPOLIS IN 46202

MAROC,JAMES ALLEN FP 174
110 RIDGE RD
MUNSTER IN 46321

MARQUINEZ,ADORACION A AN 174
2102 LITUANICA
EAST CHICAGO IN 46312

MARQUIS,GORDON OTO 258
211 N EDDY AT COLFAX
SOUTH BEND IN 46617

MARR,GRIFFITH AN 014
R R 1 BOX 10 MARR ROAD
COLUMBUS IN 47201

MARRESE,ROCCO A ORS 296
801 ST MARY'S DR
EVANSVILLE IN 47715

MARSH,CARL M FP 134
101 N SHORTRIDGE RD
INDIANAPOLIS IN 46219

MARSH,GEO WILBUR FP 286
1216 HOWELL ST
LAFAYETTE IN 47904

MARSHALL,THOMAS WENDELL ORS 014
411 PLAZA DR SUITE H
TIPTON PARK PLAZA
COLUMBUS IN 47201

MARSHALL,WILBUR JAMES OBG 174
7905 CALUMET AVE
MUNSTER IN 46321

MARSKE,ROBT L PD 178
1713 BUFFALO
MICHIGAN CITY IN 46360

MARTIN,ALLEN S FP 170
BOX 187
SHIPSHEWANA IN 46565

MARTIN,CHAS F R 258
5610 SOUTH YORK RD
SOUTH BEND IN 46614

MARTIN,DAVID LEE D 186
R R 4 BOX 152
PENDLETON IN 46064

MARTIN,DONALD LANE FP 310
304 E MARKET ST
SALEM IN 47167

MARTIN,FREEMAN FP 134
3901 N MERIDIAN
INDIANAPOLIS IN 46208

MARTIN,JOHN PHILLIP AN 082
105 THREE RIVERS NORTH
FORT WAYNE IN 46802

MARTIN,LOREN HAROLD FP 134
2626 W WASHINGTON ST
INDIANAPOLIS IN 46222

MARTIN,NOEL JACKSON EM 306
1509 WASHINGTON ST
BOONVILLE IN 47601

MARTINEZ,GUILLERMO G GS 050
502 3RD ST
AURORA IN 47001

MARTINEZ,LUIS DIA ORS 174
7905 CALUMET
MUNSTER IN 46321

MARTINO,ROBERT S ORS 174
5587 BROADWAY
MERRILLVILLE IN 46410

MARTINOV,WM EDWARD CDS 258
720 EAST CEDAR
SOUTH BEND IN 46617

MARTIREZ,NAPOLEON A GS 174
4710 INDIANAPOLIS BLVD
EAST CHICAGO IN 46312

MARTY,ALAN THOS CDS 296
350 W COLUMBIA STREET
SUITE 350
EVANSVILLE IN 47710

MARTZ,BILL L PA 134
216 W TILDEN RD
BROWNSBURG IN 46112

MARTZ,CARL D ORS 134
657 BAL HARBOR BLVD
PUNTA GORDA FL 33950

MARVEL,HOWARD ROLAND A 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

MARVEL,JAMES ANDREW A 296
421 CHESTNUT ST
EVANSVILLE IN 47713

MARVEL,ROBT J IM 242
600 ARLINGTON ST
GREENCASTLE IN 46135

MASBAUM,NED PAUL P 134
1010 EAST 86TH STE 48
INDIANAPOLIS IN 46240

MASCHMEYER,ROBT HENRY D 134
R R 1 BOX 122A
ZIONSVILLE IN 46077

MASON,DONALD GOODING FP 278
112 S WAYNE ST
ANGOLA IN 46703

MASON,EARL JAMES PTH 174
540 TYLER STREET
GARY IN 46402

MASON,EVERETT ELMORE FP 296
3700 BELLEMEADE
EVANSVILLE IN 47715

MASON,JOHN CHAS FP 174
7905 CALUMET AVE
MUNSTER IN 46321

MASON,LESTER MILLARD D 298
MERCHANTS BK BLDG 314
TERRE HAUTE IN 47801

MASON,RICHARD L R 174
130 RIDGE ROAD
MUNSTER IN 46321

MASSANARI,WALTER S AN 070
211 EGBERT RD
GOSHEN IN 46526

MASSER,FRANCES JOAN PTH 034
1220 MISSOURI AVE
LABORATORY CLARK CO MEM HOSP
JEFFERSONVILLE IN 47130

MASSUDA,YACOUB AN 230
239 LINCOLN HILL DRIVE
VALPARAISO IN 46383

MASTERS,JOHN MELVIN — OPH — 134
34 EAST 46TH ST
INDIANAPOLIS IN 46205

MASTRANGELO,MICHAEL J — GS — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

MATHER,CHAS R — OBG — 286
2600 GREENBUSH
LAFAYETTE IN 47902

MATHER,GLENN BURTON — NM — 214
BLOOMINGTON HOSP
P O BOX 1149
BLOOMINGTON IN 47401

MATHER,ROBT LINCOLN — OPH — 286
805 PURDUE NATIONAL BANK BLDG
LAFAYETTE IN 47901

MATHEU,HERACLEO I — P — 166
PO BOX 231
WARSAW IN 46580

MATHEW,PALLIPEEDIKAIL C — FP — 130
1775 NORTH JEFFERSON ST
HUNTINGTON IN 46750

MATHEWS,FRANKLIN — N — 286
1502 HARTFORD ST SUITE 102
LAFAYETTE IN 47904

MATHEWS,JAMES R — R — 296
901 S MEADOW RD
EVANSVILLE IN 47715

MATIBAG,VICTOR PAPA — N — 034
209 SPARKS AVE
JEFFERSONVILLE IN 47130

MATLOCK,CARL KENT — FP — 110
746 NORTH ST
GREENFIELD IN 46140

MATTHEW,JOHN ROBT — GPM — 274
317 CARLSON DR
KNOX IN 46534

MATTHEWS,LELAND RAY — OBG — 214
421 W 1ST ST
BLOOMINGTON IN 47401

MATTHEWS,WM M — AN — 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

MATTOX,DEAN LLOYD — FP — 278
BOX 210
FAMILY PHYSICIANS INC
LAGRANGE IN 46761

MATZEN,RICHARD NORMAN — PUD — 318
301 SOUTH MAIN ST
BLUFFTON IN 46714

MAUS,RONALD TRENT — FP — 126
800 S BERKLEY
KOKOMO IN 46901

MAUZY,MERRITT C — PS — 258
216 SHERLAND BLDG
SOUTH BEND IN 46601

MAXAM,BEVERLY TRENT — GE — 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

MAXSON,ROY VERNON — AN — 134
5435 EMERSON WAY NORTH
WINDRIDGE OFFICE BLDG STE 115
INDIANAPOLIS IN 46226

MAY,A J — FP — 122
606 BLACK ROAD
NEW CASTLE IN 47362

MAY,RICHARD MILTON — FP — 114
LACONIA IN 47135

MAYERS,STEPHEN CRAIG — FP — 026
115 NORTH CENTER STREET
FLORA IN 46929

MAYHUE,HUGH WAYNE — OBG — 034
1705
JEF CHAS PIKE
JEFFERSONVILLE IN 47130

MAYOCK,PETER PAUL — D — 318
303 S MAIN ST
BLUFFTON IN 46714

MAYROSE,RICHARD SMITH — FP — 298
1645 NORTH 7TH ST
TERRE HAUTE IN 47802

MAZDAI,ABOUZARJOMEHR — GS — 074
707 W 3RD ST
CONNERSVILLE IN 47331

MC ADAMS,HUGH BEST — FP — 286
2500 FERRY ST
MEDICAL ARTS BLDG
LAFAYETTE IN 47904

MC ADAMS,ROBT C — FP — 286
2011 KOSSUTH ST
LAFAYETTE IN 47905

MC AFEE,GEO JOS — CHP — 082
1315 WEST TENTH ST
INDIANAPOLIS IN 46202

MC AFEE,JAMES RAYMOND — FP — 022
1608 N LEBANON ST
LEBANON IN 46052

MC ALEAVEY,PATRICK JOS — AN — 134
4167 NORTH WASHINGTON AVE
INDIANAPOLIS IN 46205

MC ALEESE,GEO BUCHANAN — GS — 298
1024 SOUTH 6TH ST
TERRE HAUTE IN 47807

MC ALLISTER,ALLAN J — US — 122
1000 NORTH 16TH STREET
NEW CASTLE IN 47362

MC ALPINE,RICHARD J FP 302
110 N ELM ST
NORTH MANCHESTER IN 46962

MC ARDLE,MICHAEL L ORS 082
2609 FAIRFIELD AVE
FORT WAYNE IN 46807

MC AREE,FRANCIS EDWARD OBG 134
5521 OVERBROOK CR
INDIANAPOLIS IN 46226

MC ART,BRUCE A GS 070
1332 W INDIANA
ELKHART IN 46514

MC ATEE,OTT BENTON US 150
MADISON STATE HOSP
MADISON IN 47250

MC BRIDE,NOEL SAMUEL OPH 298
MERCHANTS BANK BLDG 407
TERRE HAUTE IN 47801

MC BRIDE,ROBT EDMUND PTH 178
P O BOX 341
MICHIGAN CITY IN 46360

MC CALLA,CHAS X FP 210
BOX 151
PAOLI IN 47454

MC CALLISTER,JOHN WM GS 082
3124 E STATE ST
FORT WAYNE IN 46805

MC CALLISTER,LARRY LEE FP 062
1616 W MC GALLIARD
MUNCIE IN 47304

MC CALLUM,DONALD CAREY U 134
6220 EAST 56TH STREET
INDIANAPOLIS IN 46226

MC CALLUM,JAMES JOS OPH 134
8402 N HARCOURT RD STE 610
INDIANAPOLIS IN 46260

MC CALLUM,ROBT NEIL CO 134
313 EAST CARMEL DRIVE
CARMEL IN 46032

MC CARTHY,JOSEPH CLARK EM 296
5500 GRIMM ROAD
NEWBURGH IN 47630

MC CARTHY,LEO JOS PTH 134
7480 HOLLIDAY DR EAST
INDIANAPOLIS IN 46260

MC CARTNEY,DONALD H ORS 134
1500 ALBANY ST SUITE 705
BEECH GROVE IN 46107

MC CARTY,VIRGIL US 094
P O BOX 45
PRINCETON IN 47670

MC CASLIN,DAN LESTER R 082
1300 SOUTH CLINTON ST
FORT WAYNE IN 46802

MC CLAIN,EDWIN S OBG 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

MC CLAIN,MARVIN LEVI FP 262
384 E MC CLAIN ST
SCOTTSBURG IN 47170

MC CLARY,CHAS WENDELL FP 214
839 AUTO MALL RD
BLOOMINGTON IN 47401

MC CLINTOCK,JAMES A GS 062
316 W ADAMS ST
MUNCIE IN 47305

MC CLOUD,L C PTH 034
CLARK COUNTY HOSP
JEFFERSONVILLE IN 47130

MC CLURE,CHESTER FERRIS P 178
POTTAWATTAMIE PARK
112 GARDEN TRAIL
MICHIGAN CITY IN 46360

MC CLURE,CLARK T FP 230
PORTER MEM HOSP 814 LAPORTE ST
VALPARAISO IN 46383

MC CLURE,GLEN GS 282
777 N WOLFENBERGER
SULLIVAN IN 47882

MC CLURE,LARRY THOMAS FP 296
426 KIMBER LANE
EVANSVILLE IN 47715

MC CLURE,MORRIS E 118
307 EAST MC CARTY ST
INDIANAPOLIS IN 46206

MC CLURE,WARREN N FP 126
319 S BERKLEY RD
KOKOMO IN 46901

MC CONNELL,THOS LEE FP 062
WOOD HEALTH CENTER
BALL STATE UNIVERSITY
MUNCIE IN 47306

MC CONNELL,WM CHAS FP 250
512 N MERIDEAN ST
SUNMAN IN 47041

MC COOL,JOE HENRY P 296
P O BOX 306 C L V
SANTA CLAUS IN 47579

MC CORD,GEO ELLIOTT OPH 134
5506 E 16TH ST
INDIANAPOLIS IN 46218

MC CORMACK,WILLIAM M R 298
1021 S SIXTH ST
TERRE HAUTE IN 47807

MC COY,MELVIN HOWARD P 296
415 MULBERRY ST
EVANSVILLE IN 47713

MC CRALEY,WM J — FP — 258
1737 BELMONT
SOUTH BEND IN 46615

MC CREA,FRED RONALD — R — 298
2517 NORTH 8TH ST
TERRE HAUTE IN 47804

MC CULLOUGH,HENRY G — FP — 014
R D 4
COLUMBUS IN 47201

MC CULLOUGH,JAMES Y — GS — 078
700 E SPRING ST
NEW ALBANY IN 47150

MC CULLOUGH,JAMES YOUNG — GS — 078
708 E SPRING ST
NEW ALBANY IN 47150

MC CULLOUGH,JOHN P — 062
2600 W GILBERT
NO D
MUNCIE IN 47303

MC CUNE,WILLIAM MICHAEL — 134
1633 N CAPITOL AVE
INDIANAPOLIS IN 46202

MC CURDY,ROBERT WILLIAM — GS — 186
2117 E 5 STREET
ANDERSON IN 46012

MC DANIEL,EDWIN CORR — U — 134
1815 N CAPITOL AVE SUITE 403
INDIANAPOLIS IN 46202

MC DONALD,EUGENE W — IM — 258
919 E JEFFERSON BLVD
SUITE NO 401
SOUTH BEND IN 46617

MC DONALD,FRANK C — FP — 122
365 TROJAN LANE
NEW CASTLE IN 47362

MC DONALD,JOS DOUGLAS — GS — 296
4300 LINCOLN AVE
EVANSVILLE IN 47715

MC DONALD,WALTER EVERETT — GS — 174
2200 GRANT ST
GARY IN 46404

MC DOUGAL,BUD HOLLAND — GS — 134
8402 HARCOURT ROAD NO 417
INDIANAPOLIS IN 46260

MC DOUGAL,ROBT A — PTH — 118
HENDRICKS COUNTY HOSPITAL
DANVILLE IN 46122

MC DOWELL,FLETCHER W — GS — 062
920 W MAIN ST
MUNCIE IN 47305

MC DOWELL,GEO ARNOLD — FP — 082
215 MEDICAL CTR BLDG
FORT WAYNE IN 46802

MC DOWELL,MORDECAI M — IM — 162
1322 AUDUBON RD
VINCENNES IN 47591

MC DOWELL,ROBERT W — 062
295 LONE BEECH DRIVE
MUNCIE IN 47302

MC EACHERN,CECIL G — GS — 082
2424 FAIRFIELD AVE
FORT WAYNE IN 46807

MC ELROY,JAMES THOS — IM — 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

MC ELROY,ROBT JON — IM — 296
515 READ ST
EVANSVILLE IN 47710

MC ELROY,ROBT SAML — ABS — 094
P O BOX 509
PRINCETON IN 47670

MC EWEN,DAVID AIKIN — DR — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

MC FADDEN,JAMES M — PTH — 286
2500 FERRY ST
LAFAYETTE IN 47904

MC FADDEN,WILBUR DEAN — FP — 302
1104 N WAYNE
NORTH MANCHESTER IN 46962

MC FARLAND,CORLEY B — OPH — 258
211 NORTH EDDY AT COLFAX
SOUTH BEND IN 46617

MC GARVEY,WILLIAM K — OTO — 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

MC GILL,JOEL LEWIS — PD — 138
213 EAST CROSS ST
BROWNSTOWN IN 47220

MC GOVERN,FRANCIS D — PTH — 134
301 EAST 38TH STREET
INDIANAPOLIS IN 46205

MC GRAW,WM ELMER — DR — 134
1815 N CAPITOL
INDIANAPOLIS IN 46202

MC ILROY,RICHARD — U — 014
DOCTOR'S PARK #3
COLUMBUS IN 47201

MC INTIRE,CLARENCE R — R — 214
BOX 1149
BLOOMINGTON IN 47401

MC INTOSH,WILBERT — FP — 298
BOX 507
RILEY IN 47871

MC INTYRE,JAMES MURRAY — CRS — 134
1815 N CAPITAL
INDIANAPOLIS IN 46202

MC KAY,MIKE J
3109 RIGGIN ROAD
MUNCIE IN 47304 062

MC KECHNIE,ROBT KELLAR FP 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

MC KEE,HARRY G FP 254
208 W 1ST ST
RUSHVILLE IN 46173

MC KEE,ROY G FP 122
606 N FAIR OAKS
NEW CASTLE IN 47362

MC KINLEY,A DAVID CD 134
I U MEDICAL CENTER
INDIANAPOLIS IN 46202

MC KINLEY,JOS U 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

MC KINNEY,DONALD LEROY FP 286
BOX 398
OTTERBEIN IN 47970

MC KINNEY,KENT G 296
3200 NESTER HILL
NEWBURGH IN 47630

MC KITTRICK,JACK FP 046
GREEN ACRES
WASHINGTON IN 47501

MC LAREN,DANL EDWARD FP 134
8060 KNUE ROAD
SUITE 120
INDIANAPOLIS IN 46250

MC LAUGHLIN,GORDON C DR 134
1500 NORTH RITTER
INDIANAPOLIS IN 46219

MC LAUGHLIN,GORDON C PD 298
1644 S 25TH ST
TERRE HAUTE IN 47803

MC LAUGHLIN,JAMES R FP 026
511 E MAIN ST
FLORA IN 46929

MC MAHAN,VIRGIL CARROL ORS 162
R R #3 BOX 36
VINCENNES IN 47591

MC MEEL,JAMES EUGENE OM 258
2604 S TWYCKENHAM
SOUTH BEND IN 46614

MC MURRAY,STEPHEN D IM 082
1303 ILLSBY DR
FORT WAYNE IN 46807

MC NABB,RICHARD C CHP 254
R R 1
CARTHAGE IN 46115

MC NAUGHTON,THOS MARVIN FP 046
11 EAST MAIN STREET
WASHINGTON IN 47501

MC NEELY,MATTHEW J FP 050
36 BAY VIEW PARADISE BAY PK
BRADENTON FL 33507

MC NIEL,KENNETH WAYNE FP 282
P O BOX 97
SHELBURN IN 47879

MC NUTT,CYRUS CHARLES AN 134
8639 LANCASTER RD
INDIANAPOLIS IN 46260

MC PHERSON,RICHARD CLARK GS 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

MC QUADE,JOHN ALLEN FP 258
1522 PORTAGE
SOUTH BEND IN 46616

MC QUISTON,RALPH J OTO 134
6120 LAWRENCE DR
INDIANAPOLIS IN 46226

MC QUISTON,ROBT DOUGLAS OTO 134
20 NORTH MERIDIAN ST
INDIANAPOLIS IN 46204

MC WILLIAMS,WM BRYAN FP 314
R R 2
LIBERTY IN 47353

MEADE,DONNA JOAN IM 134
5699 E 71ST ST
INDIANAPOLIS IN 46220

MEALEY,JOHN NS 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

MEDINA,ANGELINA VELOIRA FP 174
800 MACARTHUR BLVD SUITE 5
MUNSTER IN 46321

MEDINA,HERBERT LEONARDO FP 174
800 MAC ARTHUR BLVD S-5
MUNSTER IN 46321

MEGENHARDT,DENNIS S GS 134
3266 N MERIDIAN STE 606
INDIANAPOLIS IN 46208

MEGREMIS,THEODORE L R 214
BOX 1149
BLOOMINGTON IN 47401

MEHTA,MAHESH P EM 174
600 GRANT STREET
GARY IN 46404

MEIER,DONALD W GS 318
303 S MAIN ST
BLUFFTON IN 46714

MEISENHEIMER,MARTIN P GE 134
3130 NORTH MERIDIAN STREET
INDIANAPOLIS IN 46208

MEISER,ROBT DEWITT OPH 130
4831-A DOVEWOOD CIRCLE
BOYNTON BEACH FL 33436

MEISSEL,ROBT LEE FP 298
1655 N 7TH ST
TERRE HAUTE IN 47804

MELCHIOR,JEROME EDWARD U 162
615 DUBOIS ST
VINCENNES IN 47591

MELIN,JOHN R OBG 134
1633 NORTH CAPITOL AVE.
INDIANAPOLIS IN 46202

MELINA,CARL MARK FP 062
2401 UNIVERSITY AVE
MUNCIE IN 47304

MELLINGER,MICHAEL OWEN FP 170
300 NORTH TOWNLINE ROAD
LAGRANGE IN 46761

MELTON,MARVIN EUGENE PTH 134
5122 EAST 75TH ST
INDIANAPOLIS IN 46250

MENCIAS,LEON A GS 134
1050 FIESTA DR
GREENWOOD IN 46142

MENDELSON,STANLEY M FP 126
401 E REYNOLDS DR
KOKOMO IN 46901

MENDOZA,FELICISIMO SUNGA FP 074
710 PARKWAY DR
CAMBRIDGE CITY IN 47327

MENGELT,THOS PAUL FP 186
1800 NORTH B STREET
ELWOOD IN 46036

MENKE,WILBER J FP 298
3050 POPLAR ST
TERRE HAUTE IN 47803

MENSCH,JAMES R AN 082
2120 FOREST PARK BLVD
FORT WAYNE IN 46805

MENTENDIEK,MARY ANN IM 134
5699 E 71ST
INDIANAPOLIS IN 46220

MENTZER,WM GILBERT OBG 286
2400 FERRY ST
LAFAYETTE IN 47904

MERCER,SAML R D 082
710 MEDICAL CTR BLDG
FORT WAYNE IN 46802

MERCHO,JEAN PHARAON GS 134
1213 N ARLINGTON
INDIANAPOLIS IN 46219

MEREDITH,JESSE H FP 290
202 SOUTH WEST ST
TIPTON IN 46072

MERICLE,EARL WM P 134
8455 WASHINGTON BLVD
INDIANAPOLIS IN 46240

MERK,PHILIP FREDERICK PD 134
7541 MOHAWK LANE
INDIANAPOLIS IN 46260

MERKLE,GEO WALLACE FP 318
303 S MAIN ST
BLUFFTON IN 46714

MERNITZ,ROLAND BALDWIN GS 302
400 ASH ST
WABASH IN 46992

MERSHON,JACK B PTH 134
118 SUNSET LN
WEST LAFAYETTE IN 47906

MERTZ,JOHN HENRY O U 134
2010 WEST 86TH ST
INDIANAPOLIS IN 46260

MESHBERGER,FRANK LYNN OBG 186
2101 JACKSON ST
ST JOHN'S MED ARTS BLDG #211
ANDERSON IN 46014

MESSER,FRANK WILBURN FP 206
115 E RUSH ST
KENDALLVILLE IN 46755

METCALFE,GRANT EMORY P 258
101 S CONESTOGA LANE
SOUTH BEND IN 46617

MEYER,CLAUDE JAMES FP 034
935 WATER STREET
CHARLESTOWN IN 47111

MEYER,HERMAN ARTHUR FP 082
1030 W WAYNE ST
FORT WAYNE IN 46804

MEYER,STEVEN C IM 082
2500 EAST STATE BLVD
FORT WAYNE IN 46805

MEYER,STEVEN M OPH 258
513 NORTH MICHIGAN ST
SOUTH BEND IN 46601

MEYER,THEODORE OBED OPH 082
3728 KIRKWOOD DR
FORT WAYNE IN 46805

MEYERS,MARK ELMER FP 296
1108 GLEN MOORE CT
EVANSVILLE IN 47715

MEYERS,WM LOUIS FP 070
RT 3
SYRACUSE IN 46567

MICHAEL,ISAAC ELDREW IM 134
2010 W 86TH ST
INDIANAPOLIS IN 46260

MICHAEL,ROBT L GS 126
800 SOUTH BERKLEY ROAD
KOKOMO IN 46901

MICHL,LEON GEO GS 150
426 E MAIN
MADISON IN 47250

MIDDLETON,RAMONA J OBG 070
1400 HUDSON ST
ELKHART IN 46514

MIDDLETON,THOS O PD 214
PO BOX 457
BLOOMINGTON IN 47401

MIDELKA,ANDREW PTH 134
3266 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

MIETHKE,RICHARD PAUL OM 126
DELCO ELECTRONICS DIV GMC
700 E FIRMIN ST MS A151
KOKOMO IN 46901

MIKLOZEK,JOHN EDMUND FP 298
660 IDAHO
TERRE HAUTE IN 47802

MIKULASCHEK,WALTER M RHU 134
7821 JULES LANE
INDIANAPOLIS IN 46278

MILAN,JOS F GS 214
619 WEST 1ST ST
BLOOMINGTON IN 47401

MILAN,SHIJACHKI DUSHAN FP 174
622 W CHICAGO AVE
EAST CHICAGO IN 46312

MILLAN,FELIX PM 174
1117 MELBROOK DR
MUNSTER IN 46321

MILLAN,JOSELITO LECAROS NS 034
MED ARTS BLDG 207 SPARKS AVE
JEFFERSONVILLE IN 47130

MILLER,ALBERT JOHN PTH 286
2500 FERRY ST
LAFAYETTE IN 47904

MILLER,CHARLES L US 162
9 MAGNOLIA CROSSING
SAVANNAH GA 31411

MILLER,DENNIS WARREN AN 134
P O BOX 163
ZIONSVILLE IN 46077

MILLER,DON EUGENE IM 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

MILLER,DONALD C FP 174
13963 MORSE ST
CEDAR LAKE IN 46303

MILLER,DONALD G EM 070
24847 COUNTY RD 20
ELKHART IN 46514

MILLER,EDWARD DWAYNE OPH 082
3030 LAKE AVE
FORT WAYNE IN 46805

MILLER,ELGAN LEE OBG 078
1919 STATE STREET
305 PROFESSIONAL ARTS BLDG
NEW ALBANY IN 47150

MILLER,FRANK HINER OPH 134
5506 EAST 16TH STREET
INDIANAPOLIS IN 46218

MILLER,FRANK HINER OPH 134
5506 E 16TH ST
INDIANAPOLIS IN 46218

MILLER,GALEN ROBT GS 070
2229 THORNDALE CT
ELKHART IN 46514

MILLER,GARY LEE GS 030
1201 MICHIGAN AVE
LOGANSPORT IN 46947

MILLER,GERALD LE ROY FP 318
BOX 307
MARKLE IN 46770

MILLER,HAROLD EDWIN FP 138
733 W 7TH ST
SEYMOUR IN 47274

MILLER,HAROLD L ORS 314
1250 CHESTER BLVD
RICHMOND IN 47374

MILLER,HUGH A IM 070
PECK ACADEMY RD RR #2
CONSTANTINE MI 49042

MILLER,J THOS R 082
700 BROADWAY
FORT WAYNE IN 46802

MILLER,JAMES CATRON FP 054
317 N FRANKLIN ST
GREENSBURG IN 47240

MILLER,JAMES RALPH FP 070
306 W WATERFORD ST
WAKARUSA IN 46573

MILLER,JERRY ALLEN AN 134
3266 N MERIDIAN ST NO 407
INDIANAPOLIS IN 46208

MILLER,JERRY ROLAND AN 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

MILLER,JOHN DAVID PUD 134
3530 SOUTH KEYSTONE AVE
INDIANAPOLIS IN 46227

MILLER,JOS A FP 110
11929 EAST 65TH ST
OAKLANDON IN 46236

MILLER,KENNETH DEVON EM 082
BOX 128
WOODBURN IN 46797

MILLER,L HOYT FP 134
SUITE 120
8060 KNUE RD
INDIANAPOLIS IN 46250

MILLER,LA VERNE BAXTER FP 296
1421 N MAIN ST
EVANSVILLE IN 47711

MILLER,MARSHALL S IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

MILLER,MAURICE FP 178
1225 E COOLSPRING
MICHIGAN CITY IN 46360

MILLER,MILTON JOHN FP 296
15 W FRANKLIN ST
EVANSVILLE IN 47710

MILLER,ORVAL JEROME FP 082
1810 KENSINGTON BLVD
FORT WAYNE IN 46805

MILLER,RAY DONALD FP 202
300 MAPLE TURN ROAD
MARTINSVILLE IN 46151

MILLER,RICHARD CHAS FP 266
17 W MECHANIC ST
SHELBYVILLE IN 46176

MILLER,RICHARD HENRY GS 082
511 W WAYNE ST
FORT WAYNE IN 46802

MILLER,ROBT BENJ OTO 082
3017 KENWOOD AVE
FORT WAYNE IN 46805

MILLER,ROBT JOHN FP 202
NO 5245
STATE RD 37 SOUTH
MARTINSVILLE IN 46151

MILLER,ROLAND EDWARD PD 286
2200 SCOTT ST
LAFAYETTE IN 47904

MILLER,ROSCOE E OR 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

MILLER,SAML T FP 070
5892 EASY STREET APT L NO 25
BRADENTON FL 33507

MILLER,STEPHEN ROGERS US 062
R R 8 BOX 456
MUNCIE IN 47302

MILLER,STEPHEN THOS GS 134
5508 E 16TH
INDIANAPOLIS IN 46218

MILLER,WAYNE STARR GS 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

MILLER,WM AMON FP 122
99 S WASHINGTON
HAGERSTOWN IN 47346

MILLER,WM JACOB IM 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

MILLER,WM JOS R 286
58 THISE COURT
LAFAYETTE IN 47905

MILLIGAN,SAML LYMAN IM 258
720 EAST CEDAR ST SUITE 270
SOUTH BEND IN 46617

MILLIS,ARTHUR B PM 314
1250 CHESTER BLVD
RICHMOND IN 47374

MILLIS,SAML CLARK FP 198
312 JONES AVE
CRAWFORDSVILLE IN 47933

MILLS,FRED EDWARD PTH 296
DEACONESS HOSPITAL
EVANSVILLE IN 47710

MILLSAPS,RALPH D IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

MILNE,WALTER SCOTT IM 178
916 WASHINGTON ST
MICHIGAN CITY IN 46360

MILOS,ROBT JOS GS 174
8127 MERRILLVILLE RD
MERRILLVILLE IN 46410

MIN,DAVID PYONG-WHA OBG 174
800 MACARTHUR BLVD
MUNSTER IN 46321

MINCZEWSKI,RICHARD C FP 174
5490 BROADWAY PLAZA
MERRILLVILLE IN 46410

MINICK,LINUS J FP 082
WHITLEY AT MULBERRY
CHURUBUSCO IN 46723

MINKIN,RONALD BLAINE D 174
7905 CALUMET
MUNSTER IN 46321

MINO,ROBT A GS 296
903 EDGAR ST
EVANSVILLE IN 47710

MINTER,DONALD LEE FP 070
112 WEST HIGH PARK AVE
GOSHEN IN 46526

MINTZ,ALFRED M ORS 174
800 MAC ARTHUR BLVD
MUNSTER IN 46321

MIRANDA,CONRADO R GS 246
702 BROWNE ST
WINCHESTER IN 47394

MIRICH,ERNEST C CD 174
1000 W 127TH PLACE
CROWN POINT IN 46307

MIRRO,JOHN ANTHONY FP 174
6111 HARRISON
MERRILLVILLE IN 46410

MIRRO,JOHN ANTHONY GE 174
124 NORTH MAIN ST
CROWN POINT IN 46307

MISCH,WM A FP 174
13963 MONSE ST
CEDAR LAKE IN 46303

MISHKIN,IRVING FP 070
209 S 2ND ST
ELKHART IN 46514

MISHKIN,MARVIN ELI IM 070
209 S 2ND ST
ELKHART IN 46514

MISHLER,JOE BILL FP 326
BOX 134
PIERCETON IN 46562

MITCHELL,GARY ALAN NEP 258
720 EAST CEDAR SUITE 270
SOUTH BEND IN 46617

MITCHELL,GEORGIA BONE FP 174
3195 BROADWAY
GARY IN 46408

MITCHELL,JAMES PAUL AN 214
615 W FIRST ST
BLOOMINGTON IN 47401

MITCHELL,JOHN SAMUEL PD 134
3000 MEADOWS PARKWAY
INDIANAPOLIS IN 46205

MITMAN,URSULA E DR 118
R R 2 BOX 323
PLAINFIELD IN 46168

MITRE,ISAAC NAZRI OBG 298
1645 NORTH 7TH STREET
TERRE HAUTE IN 47804

MIYAMOTO,RICHARD TAKASHI OTO 134
9047 RIPON COURT
INDIANAPOLIS IN 46268

MLADICK,EDWARD A ORS 178
1110 INDIANA AVE
LA PORTE IN 46350

MOAK,GLENN D R 134
4339 ROYAL PINE BLVD
INDIANAPOLIS IN 46250

MOATS,CARL FRANKLIN FP 082
4007 S WAYNE AVE
FORT WAYNE IN 46807

MOAYAD,CYRUS OTO 230
1105 E GLNDALE BLVD
VALPARAISO IN 46383

MOCK,LAWRENCE FARRELL ORS 318
303 S MAIN ST
BLUFFTON IN 46714

MODISETT,MARCELLA L S OBG 150
722 W MAIN ST
MADISON IN 47250

MOE,JOHN FREDRICK FP 134
3500 LAFAYETTE RD 202
INDIANAPOLIS IN 46222

MOELLER,VICTOR C FP 082
2424 FAIRFIELD AVE
FORT WAYNE IN 46807

MOENNING,JOHN EDWARD GS 110
10 WEST BOYD STREET
GREENFIELD IN 46140

MOFFETT,JAMES B A 174
701 SARATOGA ST
CROWN POINT IN 46307

MOHEBAN,JOS FP 266
120 W WASHINGTON
SHELBYVILLE IN 46176

MOHLER,FLOYD W ORS 014
TIPTON PARK PLAZA
411 PLAZA DRIVE SUITE H
COLUMBUS IN 47201

MOHRMAN,JOHN STEVEN FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

MOHRMAN,MICHAEL S FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

MOHRS,PAUL EDWARD AN 286
1001 LIFE BLDG
LAFAYETTE IN 47901

MOK,LYNN CHANG AN 296
8500 WHETSTONE RD
EVANSVILLE IN 47711

MOK,YING SUNG ORS 296
421 CHESTNUT ST
EVANSVILLE IN 47713

MOLENGRAFT,CORNELIUS J OBG 174
504 BROADWAY
GARY IN 46402

MOLLABASHY,DJAVAD AN 302
WABASH COUNTY HOSP
WABASH IN 46992

MOLSTAD,CLAY L IM 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

MONAR,MICHAEL O FP 270
6TH AND MAIN
ROCKPORT IN 47635

MONEYHUN,JAMES EMMETT FP 186
2009 BROWN ST
ANDERSON IN 46014

MONKS,JAMES L GE 174
7905 CALUMET
MUNSTER IN 46321

MONN,LARRY NEIL PS 134
5626 EAST 16TH ST
INDIANAPOLIS IN 46218

MONTECILLO,ANTOLIN M FP 218
257 WALNUT ST
CLINTON IN 47842

MONTES,HERMINIO Y — AN — 174
7915 HOHMAN AVE
MUNSTER IN 46321

MONTGOMERY,CHARLES E — ORS — 082
5204 WAPITI DRIVE
FORT WAYNE IN 46804

MONTGOMERY,LALL G — PTH — 062
BALL MEMORIAL HOSPITAL
MUNCIE IN 47303

MONTGOMERY,RALPH F — OBG — 062
2501 W JACKSON
MUNCIE IN 47303

MONTOYA,HENRY ELMER — RHU — 134
11711 ROLLING SPRINGS DR
CARMEL IN 46032

MONTOYA,RUBEN E — AN — 034
207 SPARKS AVE
P O BOX 826
JEFFERSONVILLE IN 47130

MONTUORI,GIULIA — GPM — 174
404 SHOREWOOD COURT
VALPARAISO IN 46383

MOON,CHAS E — FP — 038
111 N WALNUT ST
BRAZIL IN 47834

MOORE,DONALD CHARLES — R — 014
P O BOX 1480
COLUMBUS IN 47201

MOORE,DONALD FLOYD — P — 134
1315 W 10TH ST
INDIANAPOLIS IN 46207

MOORE,EDWIN GRIFFEN — FP — 174
26 E 15TH
GARY IN 46407

MOORE,GENE DOUGLAS — P — 298
2700 S 25TH
TERRE HAUTE IN 47802

MOORE,HAROLD T — AN — 134
108 KNOLL COURT APT C
NOBLESVILLE IN 46060

MOORE,JACK CONRAD — IM — 062
1904 W MC GALLIARD RD
MUNCIE IN 47304

MOORE,JOHN MANSFIELD — OBG — 126
3807 SOUTHLAND AVE
KOKOMO IN 46901

MOORE,ROBT GARDNER — DR — 162
RFD 1
BICKNELL IN 47512

MOORE,THOMAS S — PS — 134
8801 NORTH MERIDIAN ST
INDIANAPOLIS IN 46260

MOORE,THOS O — FP — 134
8801 NORTH MERIDIAN ST NO 206
INDIANAPOLIS IN 46260

MOORE,WM GILBERT — GS — 178
OSMIC PLACE
LA PORTE IN 46350

MOORES,WM BRADLEY — D — 134
3266 N MERIDIAN ST
SUITE 702
INDIANAPOLIS IN 46220

MOOSEY,LOUIS — FP — 178
609 S WATER ST
UNION MILLS IN 46382

MOOSEY,NEALE ANTHONY — U — 134
1213 N ARLINGTON
INDIANAPOLIS IN 46219

MORAN,THOS EDWARD — FP — 134
7150 MADISON AVE
INDIANAPOLIS IN 46227

MOREC,GEO JAMES — PD — 122
1007 N 16TH ST
NEW CASTLE IN 47362

MORETTO,THOS JAMES — FP — 134
5810 LAWRENCE DR
INDIANAPOLIS IN 46222

MOREY,EDWIN E — OBG — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

MORFORD,GUY — AN — 214
2207 E MAXWELL LNE
BLOOMINGTON IN 47401

MORGAN,MARGARET ELAINE — P — 134
4144 N PENNSYLVANIA
INDIANAPOLIS IN 46205

MORGAN,MILTON MELVIN — GS — 082
4628 S CALHOUN
FORT WAYNE IN 46807

MORGAN,RANDALL C — ORS — 174
3229 BROADWAY
GARY IN 46409

MORGAN,ROBT JOS — OBG — 134
5626 EAST 16TH ST
INDIANAPOLIS IN 46218

MORIARTY,JOHN ROBT — FP — 134
6130 SMOCK DR
INDIANAPOLIS IN 46227

MORRELL,DOUGLAS — FP — 254
606 E 11TH ST
RUSHVILLE IN 46173

MORRICAL,DAVID L — IM — 030
1201 MICHIGAN AVE
LOGANSPORT IN 46947

MORRICAL,RUSSELL J — FP — 030
415 HIGHLAND STREET
LOGANSPORT IN 46947

MORRIS,ROBT ALLEN — PD — 186
1309 PARK RD
ANDERSON IN 46011

MORRIS,ROBT LYLE DR 138
729 WEST 6TH STREET
SEYMOUR IN 47274

MORRIS,WARREN VICTOR FP 322
1017 O CONNOR BLVD
SUITE B
MONTICELLO IN 47960

MORRIS,WM HAROLD PD 174
7905 CALUMET AVE
MUNSTER IN 46321

MORRISON,ANDREW LEWIS P 134
8402 HARCOURT ROAD
INDIANAPOLIS IN 46260

MORRISON,GEO GORDON FP 050
209 4TH ST
LAWRENCEBURG IN 47025

MORRISON,JAMES TREVOR FP 054
207 N FRANKLIN ST
GREENSBURG IN 47240

MORRISON,LEWIS E PS 134
I U MED CTR RILEY HOSP A56
INDIANAPOLIS IN 46202

MORROW,ROBT JACKSON FP 182
1317 L ST
BEDFORD IN 47421

MORSE,ROBT PETER FP 134
5316 E 16TH ST
INDIANAPOLIS IN 46218

MORTENSON,LELAND JAMES FP 082
1310 W FOSTER PARKWAY
FORT WAYNE IN 46807

MORTON,JOS LEWIS TR 134
3272 W 42ND ST
INDIANAPOLIS IN 46208

MORTON,PHILIP MONROE P 134
4475 SYLVAN RD
INDIANAPOLIS IN 46208

MORTON,WALTER PHILLIPS U 134
IND NATL BANK TRUST DEPT
INDIANAPOLIS IN 46205

MORTON,WM MORGAN IM 062
420 W WASHINGTON ST
MUNCIE IN 47305

MOSBAUGH,PHILLIP GEO U 134
2020 W 86TH ST
INDIANAPOLIS IN 46260

MOSEMANN,LUKE B FP 210
RT 3
PAOLI IN 47454

MOSER,ARTHUR LEE FP 166
2235 DUBOIS ST
WARSAW IN 46580

MOSES,ROBT EARL FP 102
102 E MAIN STREET
WORTHINGTON IN 47471

MOSS,BOBBY LEE FP 134
5310 E 16TH ST
INDIANAPOLIS IN 46218

MOSS,HARLAN B GS 134
1640 N RITTER AVE
INDIANAPOLIS IN 46218

MOSS,HERSCHEL C GS 134
4802 WASHINGTON BLVD
INDIANAPOLIS IN 46205

MOSWIN,JACK ARTHUR OBG 174
7863 BROADWAY
MERRILLVILLE IN 46410

MOTHERSILL,MARK HENRY A 134
3650 N COLLEGE AVE
INDIANAPOLIS IN 46205

MOTT,H WILLIAM ORS 174
2200 GRANT ST
GARY IN 46404

MOULTON,LILLIAN G CHP 296
1 N BARKER AVE
EVANSVILLE IN 47712

MOULTRIE,H CARL IM 174
3229 BROADWAY
GARY IN 46409

MOUNT,JAMES LEE OBG 182
2900 W 16TH ST
BEDFORD IN 47421

MOUNT,MATHIAS SAML FP 102
148 S LEWIS ST
BLOOMFIELD IN 47424

MOUNT,WM MAXWELL A 286
2424 FERRY ST
LAFAYETTE IN 47904

MOUNTAIN,FRANCIS B IM 074
29 QUINTANA ROO LANE
PORT ST.LUCIE, FL 33452

MOUSER,ROBT WINSTON FP 134
6201 N PARK AVE
INDIANAPOLIS IN 46220

MUDD,JOS PAUL FP 034
815 EASTERN BLVD
CLARKSVILLE IN 47130

MUDRONY-SZOKE,JENO B R 318
303 S MAIN ST
BLUFFTON IN 46714

MUELLER,EDWIN C GS 178
901 I ST
LA PORTE IN 46350

MUELLER,HILBERT MARTIN D 258
211 N EDDY AT COLFAX
SOUTH BEND IN 46617

MUELLER,LAWRENCE W OPH 082
533 W WASHINGTON BLVD
FORT WAYNE IN 46802

MUFTI,ZAHIR-UL-HAQUE IM 074
MED-SCAN PROFESSIONAL BLDG
613-15 FRENCH RD
NEW HARTFORD NY 13413

MUHLER,JOSEPH CHARLES FP 082
3610 BROOKLYN AVE.
FORT WAYNE IN 46809

MUKHTAR,FUAD A GS 022
1202 N LUBIANON ST
LEBANON IN 46052

MULFORD,ROBT HARRY US 150
R # 1
VERSAILLES IN 47042

MULLEN,JAMES B IM 134
3620 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

MULLER,LULLUS PETER GS 134
3120 N MERIDIAN STREET
INDIANAPOLIS IN 46208

MULLER,PAUL FREDERICK OBG 134
ST VINCENTS HOSP
INDIANAPOLIS IN 46260

MULLER,VICTOR H PTH 134
2859 N MERIDIAN
INDIANAPOLIS IN 46208

MULLICAN,WM STANLEY CD 296
515 READ ST
EVANSVILLE IN 47710

MULLINIX,F MICHAEL US 134
7906 SCARBOROUGH BLVD
INDIANAPOLIS IN 46256

MUNOZ,JOSE CUI PD 082
5755 ST JOE ROAD
FORT WAYNE IN 46815

MUNSICK,ROBERT A OBG 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

MURALI,MAGARAL S IM 134
1500 N RITTER AVE
INDIANAPOLIS IN 46219

MURILLO,HERBERT LAURON EM 174
9512 PRIMROSE
MUNSTER IN 46321

MURPHY,EDWARD U OPH 296
1015 HULMAN BLDG
EVANSVILLE IN 47708

MURPHY,JOS FRANCIS P 174
18225 BURNHAM AVE
LANSING IL 60438

MURPHY,JOSEPHINE F FP 258
505 W LA SALLE
SOUTH BEND IN 46601

MURRAY,ERNEST C IM 126
2200 S WEBSTER ST
KOKOMO IN 46901

MURRAY,JOHN SUMNER 298
1024 SOUTH 6TH ST
TERRE HAUTE IN 47807

MURRAY,PATRICK DAVID ORS 062
412 WHITE RIVER BLVD
MUNCIE IN 47303

MUSGRAVE,JOHN MICHAEL ORS 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

MUSNGI,LUCIANO PESTANAS FP 186
P O BOX 150 RR 3
PENDLETON IN 46064

MUSSELMAN,LAURENCE K P 098
500 WABASH AVE
MARION IN 46952

MUSSELMAN,ROBT H FP 082
3610 BROOKLYN AVE
FORT WAYNE IN 46809

MYERS,CHAS EDWIN FP 258
303 S MAIN ST
MISHAWAKA IN 46544

MYERS,CHAS WESLEY OS 134
P O BOX 711
CARMEL IN 46032

MYERS,GERALD PAUL FP 258
3123 MISHAWAKA AVE
SOUTH BEND IN 46615

MYERS,JERRY RICHARD OPH 106
110 LAKEVIEW DRIVE
NOBLESVILLE IN 46060

MYERS,PHILIP ROBT OS 258
EAGLE LAKE
408 NORTH SHORE DR
EDWARDSBURG MI 49112

MYERS,RONALD LEE P 050
285 BIELBY ROAD
COMM MENTAL HEALTH CENTER
LAWRENCEBURG IN 47025

MYERS,ROY VERN OS 134
7710 BETO CIRCLE
WEST PALM BEACH FL 33406

NACHTNEBEL,KENNETH LOUIS GS 296
611 HARRIET ST
EVANSVILLE IN 47710

NACINO,IRINEO MONJE AN 296
10277 SCHNAPF LANE
NEWBURGH IN 47630

NAGAN,ROBT FRANCIS GS 134
555 SOMERSET DR
INDIANAPOLIS IN 46260

NAKAMURA,TAKAMITSU OTO 174
7905 CALUMET
MUNSTER IN 46321

NALE,STEPHEN WAYNE FP 078
1000 EAST SPRING ST
NEW ALBANY IN 47150

NALLEY,JAMES HARRY AN 158
R R 3 BOX 198C
FRANKLIN IN 46131

NAPPER,KARL FRANK AN 258
604 N MICHIGAN
SOUTH BEND IN 46601

NASON,ROBT ALLEN FP 058
123 E KING ST
GARRETT IN 46738

NASR,AMIN TOUFIC PTH 146
2401 RIGGIN RD
MUNCIE IN 47304

NASSER,WM KALEEL CD 134
5420 GRANDVIEW DR
INDIANAPOLIS IN 46208

NATION,ROBT DARRELL FP 134
6320 NORTH FERGUSON ST
INDIANAPOLIS IN 46220

NAVAL,JOVENTINO CRUZ FP 258
124 EAST BARTLETT STREET
SOUTH BEND IN 46601

NAVARRO,ALFONSO V IM 158
STONEGATE PROFESSIONAL PLAZA
46 STONEGATE DR
INDIANAPOLIS IN 46227

NAVARRO,CASIMIRO PERALTA OS 134
1725 EAST 56TH ST
INDIANAPOLIS IN 46220

NAY,RICHARD MARION IM 134
3130 N MERIDIAN
INDIANAPOLIS IN 46208

NAZON,YVON OBG 174
504 BROADWAY SUITE 1025
GARY IN 46402

NEAL,LEONARD WILSON FP 174
1000 AZALEA DRIVE
MUNSTER IN 46321

NEALE,ALFRED EUGENE US 186
1931 BROWN ST
ANDERSON IN 46014

NEATHAMER,THOS ALFRED FP 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

NEDELKOFF,BOGDAN PTH 078
RD 2 BOX 500H
NEW ALBANY IN 47150

NEED,DAVID JOHN PD 134
7150 MADISON AVE
INDIANAPOLIS IN 46227

NEED,LOUIS T FP 134
3627 BLUFF RD
INDIANAPOLIS IN 46217

NEED,RICHARD LOUIS IM 134
1600 ALBANY ST
BEECH GROVE IN 46107

NEELY,MICHAEL L FP 118
100 MEADOW DRIVE
DANVILLE IN 46122

NEER,DAVID DREW N 174
7550 HOHMAN AVE STE 300
MUNSTER IN 46321

NEHER,JOHN LEWIS FP 258
17615 STATE RD 23
SOUTH BEND IN 46635

NEIFERT,NOEL L FP 222
PROFESSIONAL REALTY BLDG
TELL CITY IN 47586

NELSON,BRYAN EDWARD FP 014
2760 25TH ST
COLUMBUS IN 47201

NELSON,CARL ALBERT FP 086
P O BOX 278
WEST LEBANON IN 47991

NELSON,DELBERT WM FP 318
303 SOUTH MAIN ST
BLUFFTON IN 46714

NELSON,FRANCIS DALE FP 258
1951 E FOX ST
SOUTH BEND IN 46613

NELSON,HAROLD E IM 062
1133 WARRICK ROAD
MUNCIE IN 47304

NELSON,JAMES BERT A 082
3030 LAKE AVE
FORT WAYNE IN 46805

NELSON,RAYMOND E FP 258
206 E BARTLETT ST
SOUTH BEND IN 46601

NELSON,ROBERT R FP 258
206 E BARTLETT
SOUTH BEND IN 46601

NELSON,WALFRED ARTHUR FP 174
1050 WARREN STREET
GARY IN 46403

NESTER,HENRY G PH 134
5324 N PENNSYLVANIA ST
INDIANAPOLIS IN 46220

NEUDORFF,LOUIS GEO IM 298
221 S 6TH ST
TERRE HAUTE IN 47801

NEUKAMP,FRANK H FP 074
611 LAS PALMAS
SANTA BARBARA CA 93110

NEWBY,H EUGENE FP 106
201 W 4TH ST
SHERIDAN IN 46069

NEWCOMB,WM KENOALL FP 030
BOX 158
ROYAL CENTER IN 46978

NEWMAN,ALVIN EOWARD OS 296
2937 CORAL SHORES OR
FORT LAUDEROALE FL 33306

NEWMAN,DANL MARQUETTE U 134
2010 WEST 86TH ST
INOIANAPOLIS IN 46260

NEWMAN,KERRY JON IM 296
4200 WOOOCASTLE
EVANSVILLE IN 47711

NEWNAM,PHILIP EOWARO IM 062
410 WHITE RIVER BLVD
MUNCIE IN 47303

NEWNUM,RAYMOND L IM 296
801 ST MARYS OR NO 309
EVANSVILLE IN 47715

NEWSOME,COLA KING FP 296
415 E MULBERRY ST
EVANSVILLE IN 47713

NEWTON,ROGER EUGENE OBG 296
1400 LARK LANE
EVANSVILLE IN 47708

NG,ANASTACIO C R 134
8927 SPICEWOOD RO
INDIANAPOLIS IN 46260

NICE,WM ARCHIE FP 214
4437 W TANGLEWOOD
BLOOMINGTON IN 47401

NICELY,PAULETTE G FP 134
7209 SYLVAN RIDGE RO
INDIANAPOLIS IN 46240

NICHOLAS,OENNIS J AN 134
5300 FARHILL RD
INDIANAPOLIS IN 46226

NICHOLAS,THOS OAVID US 218
ROCKVILLE TOWN SQUARE CLINIC
ROCKVILLE IN 47872

NICHOLS,HAROLO GENE P 134
1575 NORTHWESTERN AVE
INDIANAPOLIS IN 46202

NICHOLSON,RAYMOND WM FP 296
801 ST MARYS ORIVE SUITE 200
EVANSVILLE IN 47715

NICOSIA,JOHN B FP 174
1802 COLUMBUS DR
EAST CHICAGO IN 46312

NIE,LOUIS WM P 134
3231 N MERIDIAN ST
INDIANAPOLIS IN 46208

NIEOERMAYER,ALFRED JOS EM 296
960 WASHINGTON AVE
EVANSVILLE IN 47713

NIKSCH,WM LOUIS FP 230
2102 E EVANS AVE
VALPARAISO IN 46383

NILL,JOHN HENRY FP 082
5717 S ANTHONY BLVD
FORT WAYNE IN 46806

NOE,WM ROBT GS 182
8401 ESTERO BLVD APT 301
FORT MYERS BEACH FL 33931

NOEL,LEONORA GRUEZO PO 166
649 S BUFFALO
WARSAW IN 46580

NOFZIGER,TERRY LEE FP 210
HOSPITAL ROAD
PAOLI IN 47454

NOHL,JOHN MARTIN FP 134
457 N EMERSON AVE
INDIANAPOLIS IN 46219

NOLAN,GERALD ROBT FP 082
5717 S ANTHONY BLVD
FORT WAYNE IN 46806

NOLAN,ROBT BERNARD OS 134
12124 CASTLE ROW OVERLOOK
CARMEL IN 46032

NOLIN,RICHARO THOS FP 134
313 EAST CARMEL OR NO C
CARMEL IN 46032

NONTE,LEO ROBT GS 296
OR PLAZA-611 HARRIET ST
EVANSVILLE IN 47710

NORBORG,CHRISTOPHER S OBG 258
515 NORTH LAFAYETTE
SOUTH BEND IN 46601

NOROSCHOW,CARLETON O CLP 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

NORINS,ARTHUR LEONARO O 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

NORMAN,WILLIAM H ORS 134
115 N PENNSYLVANIA ST
INDIANAPOLIS IN 46204

NOROOZI,IRAOJ OBG 298
221 SOUTH SIXTH STREET
TERRE HAUTE IN 47803

NORRIS,MAX S IM 134
3266 N MERIDIAN APT 604
INOIANAPOLIS IN 46208

NORTON,HORACE FP 046
325 KNOLLWOOD
WASHINGTON IN 47501

NOURSE,MYRON H U 134
SUITE 750
1633 NORTH CAPITOL AVE
INOIANAPOLIS IN 46202

NOVEROSKE,RICHARD JOHN R 296
3901 LINCOLN
EVANSVILLE IN 47715

NOVY,CHAS AUGUST FP 058
615 W DENNIS ST
GARRETT IN 46738

NOWLIN,WM FELBERT GS 174
8695 CONN ST SUITE D
MERRILLVILLE IN 46410

NURNBERGER,JOHN I P 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

NUTTER,WYNDHAM HUNT FP 254
1003 N MORGAN ST
RUSHVILLE IN 46173

NUVAL,AUGUSTO JOSE AN 298
7293 PRINCE DR R R 22 BOX 669
TERRE HAUTE IN 47802

O'BRIAN,EARL J FP 134
3500 LAFAYETTE RD
INDIANAPOLIS IN 46222

O'BRIAN,JOHN FRANCIS FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

O'BRIEN,DAVID MICHAEL PTH 014
2400 E 17TH ST
COLUMBUS IN 47201

O'BRIEN,FRANCIS EUGENE FP 142
WASHINGTON ST
RENSSELAER IN 47978

O'BRIEN,RAYMOND J ORS 178
1601 FRANKLIN ST
MICHIGAN CITY IN 46360

O'BRYAN,RICHARD BRUCE PD 014
2739 CENTRAL AVE
COLUMBUS IN 47201

O'DEA,PATRICK JOHN GE 258
720 CEDAR STREET
SUITE 290
SOUTH BEND IN 46617

O'DONOVAN,CORNELIUS J IM 070
MILES LABS INC
ELKHART IN 46514

O'MALLEY,PATRICK FRANCIS OPH 258
512 SHERLAND BLDG
SOUTH BEND IN 46601

O'NEIL,PATRICK RAY AN 286
7357 U S 52 SOUTH
LAFAYETTE IN 47905

O'NEILL,MARTIN JAMES OS 230
301 WASHINGTON ST
VALPARAISO IN 46383

O'ROURKE,CARROLL OPH 082
1308 THREE RIVERS EAST
FORT WAYNE IN 46802

OAK,DAVID DWIGHT FP 178
200 THOMPSON RD
HANNA IN 46340

OAK,JOHN B CD 296
SUITE 304 DOCTORS PLAZA
611 HARRIET ST
EVANSVILLE IN 47710

OBAID,NAZZAL CD 174
6111 HARRISON ST
MERRILLVILLE IN 46410

OBERLANDER,SEYMOUR IM 174
3290 GRANT ST
GARY IN 46408

OCA,CLEMENTE FERNANDEZ CD 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

OCHSNER,EDWARD C DR 118
622 N MADISON AVE
GREENWOOD RADIOLOGY
GREENWOOD IN 46142

OCHSNER,HAROLD CONRAD R 134
5850 SUNSET LANE
INDIANAPOLIS IN 46260

ODRCIC,KAZIMIR JURAJ OPH 258
211 N EDDY
SOUTH BEND IN 46617

ODULIO,BENITO V GS 182
121 6TH ST
MITCHELL IN 47446

ODULIO,BRUNHILDA IRIS IM 182
HWY 60 EAST RFD 2
MITCHELL IN 47446

OEHLER,NANCY LEE MARTIN PM 038
725 S FOREST AVE
BRAZIL IN 47834

OEHLER,ROBT CURTIS IM 038
725 SOUTH FOREST AVE
BRAZIL IN 47834

OEI,TJIEN OEN PTH 134
1100 WEST MICHIGAN ST
INDIANAPOLIS IN 46202

OESTRIKE,NORMAN WILFRED N 134
3130 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

OFFUTT,ANDREW CARROLL PH 134
750 N CAMPBELL AVE
INDIANAPOLIS IN 46219

OFFUTT,DOUGLAS CARTER IM 296
3700 BELLEMEADE AVENUE
EVANSVILLE IN 47715

OGLE,ROBT WAYNE FP 158
601 VALLEY LANE COURT
GREENWOOD IN 46142

OLDAG,GEO EDWARD GS 186
1402 SOUTH F
ELWOOD IN 46036

OLDHAM,KATHLEEN BROUGH OS 134
505 W 106TH ST
CARMEL IN 46032

OLSON,DONALD T CD 258
919 E JEFFERSON BLVD
SUITE 309 JEFF MED ARTS BLDG
SOUTH BEND IN 46617

OLSON,JEFFREY W AN 296
7555 FAIRVIEW DR
NEWBURGH IN 47630

OLSON,KENNETH L R 258
DIAMOND LAKE
CASSOPOLIS MI 49031

OLSON,L DALE ORS 230
2501 CUMBERLAND DR
VALPARAISO IN 46383

OLUFS,RICHARD DEAN PD 174
110 RIDGE RD
JONES CLINIC
MUNSTER IN 46321

OLVEY,OTTIS NIEL IM 134
420 W KESSLER BLVD
INDIANAPOLIS IN 46208

OLVEY,STEVEN EARL OS 134
1402 COTTONWOOD CIRCLE
NOBLESVILLE IN 46060

ONG,PRIMITIVA R P 214
MENTAL HEALTH CLINIC
640 S ROGERS ST
BLOOMINGTON IN 47401

ONG,TIONG GIOK FP 230
P O BOX 125
802 LA PORTE AVE
VALPARAISO IN 46383

ONORATO,JOS J IM 286
2433 S 9TH ST
LAFAYETTE IN 47905

ONYETT,HAROLD R FP 134
3021 STELLA ST
GREENWOOD IN 46142

OPPENHEIM,BERNARD E NM 134
2023 WHITEWOOD COURT
INDIANAPOLIS IN 46260

ORFANOS,TRENT GEO IM 134
2001 WEST 86TH STREET
INDIANAPOLIS IN 46260

ORNELAS,JOS PAUL A 174
6111 HARRISON ST
MERRILLVILLE IN 46410

ORR,W ROBERT ORS 258
12388 EAST JEFFERSON RD
MISHAWAKA IN 46544

OSBORNE,JOHN V GS 062
420 W WASHINGTON ST
MUNCIE IN 47305

OSOS,NANCY ANN FP 082
3818 FAIRFIELD AVE
FORT WAYNE IN 46807

OSTER,JACK H P 230
1910 BEECH ST APT 130
VALPARAISO IN 46383

OSTHEIMER,GEO JAMES FP 202
SUNNYSIDE DR BOX 23
MARTINSVILLE IN 46151

OSWALD,ROBT HAROLD OBG 296
326 S E 7TH ST
EVANSVILLE IN 47713

OSWALT,JAMES TELFER US 182
2900 W 16TH ST
BEDFORD IN 47421

OTTINGER,C JOE N 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

OVERLEY,ROSS ALAN P 134
1815 N CAPITAL AVE STE 407
INDIANAPOLIS IN 46202

OVERLEY,TONER MORTON P 134
8333 N ILLINOIS ST
INDIANAPOLIS IN 46260

OVERPECK,GEO H FP 186
RR 4 BOX 275
ALEXANDRIA IN 46001

OWEN,HUGH THOS O 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

OWEN,JOHN ELBA GS 134
11329 ROLLING SPRING DR
CARMEL IN 46032

OWEN,THOS FREDRIC FP 186
313 N HARRISON ST
ALEXANDRIA IN 46001

OWENS,LOUISE GE 214
822 WEST FIRST STREET
BLOOMINGTON IN 47401

OWENS,RICHARD LEE IM 214
4531 SHEFFIELD DRIVE
BLOOMINGTON IN 47401

OWENS,TRACY CLIFTON P 134
2211A ROME DR
INDIANAPOLIS IN 46208

OWENS,WALTER LEE OBG 214
421 W 1ST ST
BLOOMINGTON IN 47401

OWSLEY,GUY ARGYLE OTO 062
214 N HIGH ST
HARTFORD CITY IN 47348

PACIS,WILHELMINA CORTEZ US 174
25 DOUGLAS ST
ST MARGARET HOSP E R
HAMMOND IN 46320

PAFF,JAMES RICHARD HEM 126
3308 SUSAN DRIVE
KOKOMO IN 46901

PAFF,WM ALFRED IM 010
1509 MEDOW LN
ELKHART IN 46514

PAFLAS,DANL LA MAR OTO 082
3030 LAKE AVE
FORT WAYNE IN 46805

PAGE,OLIVER WENDELL GS 134
3351 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

PAIK,DO JI R 174
25 DOUGLAS ST
HAMMOND IN 46320

PAIK,GUN SIL OBG 178
1225 COOLSPRING AVE
MICHIGAN CITY IN 46360

PAINE,GEO ELSNER AN 070
P O BOX 536
BRISTOL IN 46507

PAINTER,DONALD SCOTT OBG 082
220 MED CTR BLDG
FORT WAYNE IN 46802

PAINTER,LOWELL WALTER ABS 246
124 E FRANKLIN ST
WINCHESTER IN 47394

PAIRITZ,FRANK DAVID R 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

PALMENTER,DOUGLAS SAMUEL PD 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

PALMER,BARRON M F US 174
P O BOX 1278
5815 CALUMET AVE
HAMMOND IN 46320

PALMER,HARLEY PERRY CLP 158
1130 FOREST PARK DR
FRANKLIN IN 46131

PALMER,ROBERT M ORS 134
2020 W 86TH ST
INDIANAPOLIS IN 46260

PALMER,ROBT W IM 134
5626 EAST 16TH ST
INDIANAPOLIS IN 46218

PAMINTUAN,FLORINO GANDO CD 174
7905 CALUMET AVE
MUNSTER IN 46321

PAN,CHAS CHIEH-MING PTH 082
700 BROADWAY
FORT WAYNE IN 46802

PANARES,RODRIGO REX FP 174
30 DOUGLAS ST
HAMMOND IN 46320

PANCHOLY,NAVIN CHIMANLAL GS 302
1025 MANCHESTER
WABASH IN 46992

PANCNER,RONALD JERRY P 082
1812 FORT WAYNE NATL BANK BLDG
FORT WAYNE IN 46802

PANCOST,VERNON K FP 070
1000 W MARION ST
ELKHART IN 46514

PANFILI,CATHERINE ANN IM 296
801 ST MARY'S DRIVE
SUITE 309
EVANSVILLE IN 47715

PANGAN,JESUS F IM 298
221 S SIXTH ST
TERRE HAUTE IN 47801

PANGAN,ZANITA S OBG 230
802 LA PORTE
VALPARAISO IN 46383

PANOS,CONSTANTINE GEO FP 318
227 S MAIN ST
BLUFFTON IN 46714

PANSZI,JOSE G N 062
2724 WEST NORTH ST
MUNCIE IN 47304

PANTZER,JOHN GEO PS 134
1815 N CAPITOL AVE NO 312
INDIANAPOLIS IN 46202

PAPADOPOULOS,A P ORS 070
2200 CALIFORNIA AVE
ELKHART IN 46514

PAPPAS,EDDIE THOS FP 174
6429 ARTHUR ST
MERRILLVILLE IN 46410

PARAISO,ANTONIO QUEVEDO OBG 314
830 SIM HODGIN PKWY
RICHMOND IN 47374

PARAS,JOSE LINGKOD JUANE FP 250
BATESVILLE IN 47006

PAREJA,FRANCISCO S FP 110
1225 EAST MAIN ST
GREENFIELD IN 46140

PARENT,J REX OPH 082
347 WEST BERRY ST
FORT WAYNE IN 46802

PARGAONKER,MAKRAND U GE 174
6111 HARRISON ST
MERRILLVILLE IN 46410

PARIS,DURWARD WHITEMAN IM 126
1610 W TAYLOR
KOKOMO IN 46901

PARIS,JOHN MERRILL FP 078
1919 STATE ST STE 321
NEW ALBANY IN 47150

PARK,BYRON J ORS 314
1380 CHESTER BLVD
RICHMOND IN 47374

PARK,HEE MYUNG NM 134
1608 BREWSTER RD
INDIANAPOLIS IN 46260

PARK,JASON Y S P 298
615 8TH AVE SUITE 200
TERRE HAUTE IN 47804

PARKE,WM COULTER FP 166
2335 DUBOIS DR
WARSAW IN 46580

PARKER,E CAMILLE KILLIAN OPH 030
2500 E BROADWAY
LOGANSPORT IN 46947

PARKER,FRANCIS WM OPH 030
2500 E BROADWAY
LOGANSPORT IN 46947

PARKER,GEO FRANCIS PDA 134
1502 NORTH EMERSON
INDIANAPOLIS IN 46219

PARKER,JOHN CARL FP 204
BOX 366
GOODLAND IN 47948

PARKER,JOHN FRANCIS FP 134
6508 E WASHINGTON ST
INDIANAPOLIS IN 46219

PARKS,GEO OAKS FP 062
720 N SPRING ST
HARTFORD CITY IN 47348

PARKS,HERBERT EUGENE R 134
5533 OVERBROOK CIRCLE
INDIANAPOLIS IN 46226

PARMENTER,HARRY B AN 162
502 AMERICAN BANK BLDG
VINCENNES IN 47591

PARR,ROBT LOWELL PD 134
5430 E 21ST ST
INDIANAPOLIS IN 46218

PARRATT,LOUIS WARDROP FP 174
504 BROADWAY
GARY IN 46402

PARRISH,RICHARD K OPH 010
238 S 2D ST
DECATUR IN 46733

PARSHALL,DALE BRYAN R 070
ELKHART GEN HOSP
ELKHART IN 46514

PARSONS,ROBT LA RUE ORS 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

PASALICH,JOHN NOVAK R 082
6211 COVINGTON ROAD
FORT WAYNE IN 46804

PASCUZZI,CHRIS A PTH 258
531 N MAIN ST
SOUTH BEND IN 46601

PASTOR,JULIUS WM AN 296
5901 WASHINGTON AVE
EVANSVILLE IN 47715

PATEL,ARVINDKUMAR K IM 082
1600 PAULDING RD E
FORT WAYNE IN 46816

PATEL,BIPINCHANDRA A AN 134
3350 CARSON AVE
INDIANAPOLIS IN 46227

PATEL,DINESHCHANDRA A PD 174
110 RIDGE RD
MUNSTER IN 46321

PATEL,DINKER A FP 298
221 SOUTH 6TH ST
TERRE HAUTE IN 47807

PATEL,KIRIT T PTH 074
FAYETTE MEMORIAL HOSPITAL
CONNERSVILLE IN 47331

PATEL,MANUBHAI P GS 206
COUNTRY CLUB HILLS R R 3
KENDALLVILLE IN 46755

PATEL,PULKIT JOITARAM U 298
7003 WILLIAMSBURG LN
TERRE HAUTE IN 47802

PATEL,RAMESHCHANDRA I PD 098
1251 KEM ROAD
KEM VIEW MEDICAL CENTER
MARION IN 46952

PATEL,RASHMI CHIMANLAL GS 174
7550 HOHMAN AVE
MUNSTER IN 46321

PATEL,UPENDRA H ORS 174
7550 HOHMAN AVE
MUNSTER IN 46321

PATHEJA,SURJIT SINGH DR 230
4001 SLEIGHBELL CT
VALPARAISO IN 46383

PATIENCE,IAN M US 034
STATE ROAD #3
CHARLESTOWN IN 47111

PATRICK,EDWARD A US 286
2304 INDIAN TRAIL
WEST LAFAYETTE IN 47906

PATRON,LEONARDO A AN 198
BOX 144
CRAWFORDSVILLE IN 47933

PATTERSON,JACK WALTER GS 082
6211 COVINGTON RD
FORT WAYNE IN 46804

PATTERSON,WM K AN 186
8 S PARK DR
ANDERSON IN 46011

PATTISON,JOHN DAVID IM 098
131 N WASHINGTON ST
MARION IN 46952

PATTON,CHAS NATHAN AN 286
1001 LIFE BLDG
LAFAYETTE IN 47901

PAUL,EUDELL GEO GS 174
7550 HOHMAN AVE
MUNSTER IN 46321

PAULAUSKAS,NINI M BERMUDEZ TR 134
1500 NORTH RITTER AVENUE
INDIANAPOLIS IN 46219

PAUSZEK,ROBT BRUCE PD 134
6419 JOHNSON ROAD
INDIANAPOLIS IN 46220

PAVELKA,RONALD PETER ORS 174
7905 CALUMET
MUNSTER IN 46321

PAVLICK,THEODORE JOS OPH 296
1001 WALNUT ST
EVANSVILLE IN 47713

PAYNE,ARTHUR C FP 174
2020 BROADWAY
EAST CHICAGO IN 46312

PAYNE,JAMES DAVID FP 078
1000 EAST SPRING ST
NEW ALBANY IN 47150

PAYNTER,MORRIS BURTON FP 134
115 WHITE HORSE LIV
NOBLESVILLE IN 46060

PAYNTER,WM T P 134
1330 W MICHIGAN ST
P O BOX 1964
INDIANAPOLIS IN 46206

PAZ PINEDO,JUAN A FP 134
6049 EAST WASHINGTON ST
INDIANAPOLIS IN 46219

PAZ,LUIS AUGUSTO U 122
1097 N 16TH ST
NEW CASTLE IN 47362

PEACOCK,NORMAN F OTO 198
219 BEN HUR BLDG
CRAWFORDSVILLE IN 47933

PEACOCK,ROBT COWDEN U 062
2724 W NORTH ST
MUNCIE IN 47303

PEARCE,ROBT MICHAEL P 134
5430 EAST 21ST ST
INDIANAPOLIS IN 46218

PEARCE,ROY VOYLES FP 298
269 SOUTH 26TH STREET DR
TERRE HAUTE IN 47803

PEARCE,WM LLOYD OBG 014
DOCTORS PARK
COLUMBUS IN 47201

PEARCY,MARCENE U 098
P O BOX 987
MARION IN 46952

PEARE,REEVE BURTON FP 130
1255 ENGLE ST
MEDICAL ARTS BLDG
HUNTINGTON IN 46750

PEARSON,HUEY LAWRENCE FP 082
2314 S HANNA ST
FORT WAYNE IN 46803

PEARSON,JACK WILLARD OBG 134
11715 EDEN GLEN DR
CARMEL IN 46032

PEARSON,JOHN STROTHER OM 134
ONE WEST 26TH ST
INDIANAPOLIS IN 46206

PEARSON,LYMAN REES CRS 134
637 EDGEWATER DR 431
DUNEDIN FL 33528

PEARSON,WM EPHRIUM FP 302
R R NO 2 BOX 285-A
WABASH IN 46992

PECK,FRANKLIN B IM 134
8181 LINCOLN BLVD
INDIANAPOLIS IN 46240

PECK,FRANKLIN BRUCE IM 134
5858 W LAZY S
TUCSON AZ 85713

PECK,JAMES FRANK FP 094
302 N PRINCE ST
PRINCETON IN 47670

PEDDICORD,CLIFFORD R DR 030
R R 3
RENSSELAER IN 47978

PEDEN,EMMA JANE IM 134
1303 N ARLINGTON # 7
INDIANAPOLIS IN 46219

PEDUK,MARIA A FP 296
EVANSVILLE STATE HOSP
EVANSVILLE IN 47715

PEIFFER,GERALDINE M AN 174
6541 FOREST AVE
HAMMOND IN 46324

PEIRCE,JAMES D OM 134
5027 WASHINGTON BLVD
INDIANAPOLIS IN 46205

PELL,DONALD MC LAURY IM 062
4013 W JACKSON ST
MUNCIE IN 47304

PEMBERTON,JACK JAMES FP 296
350 W COLUMBIA ST SUITE 430
EVANSVILLE IN 47710

PENA,ADELA P OS 174
THE HAMMOND CLINIC
7905 CALUMET AVE
MUNSTER IN 46321

PENKAVA,ROBT RAY DR 296
611 HARRIET ST
EVANSVILLE IN 47715

PENN,ROBT ALLAN FP 174
3 SUMMIT ROAD BOX 484
OGDEN DUNES
PORTAGE IN 46368

PENNINGTON,ROBERT GS 314
1250 CHESTER BLVD
RICHMOND IN 47374

PEPPARD,RORY JON PD 286
2600 GREENBUSH CLINIC
ARNETT CLINIC
LAFAYETTE IN 47904

PEPPLE,WALTER DAVID FP 082
P O BOX 107
AUBURN IN 46706

PERALTA,JOSE GS 198
411 TINSLEY AVE
CRAWFORDSVILLE IN 47933

PERCINEL,AHMET KEMAL HS 296
3700 BELLEMEADE AVE SUITE 122
EVANSVILLE IN 47715

PEREZ,ADELA M IM 174
2156 HART
DYER IN 46311

PEREZ,J MICHAEL U 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

PERKINS,BEVERLEY J FP 134
101 E 34TH ST
INDIANAPOLIS IN 46205

PERKINS,JON C OPH 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

PERKINS,POWELL LEON GS 126
317 S BERKLEY ST
KOKOMO IN 46901

PERRIN,JEAN PD 134
10412 HOLIDAY DRIVE
CARMEL IN 46032

PERRIN,KERMIT FLOYD FP 082
2701 S ANTHONY BLVD
FORT WAYNE IN 46806

PERRY,GUY FELAND IM 014
605 COTTAGE AVE
COLUMBUS IN 47201

PERSON,THEODORE C FP 086
601 N MILL ST
VEEDERSBURG IN 47987

PESARILLO,SERVANDO N FP 126
3900 SOUTHLAND AVE
KOKOMO IN 46901

PESIGAN,CONRADO SISON R 174
116 SOUTH DELPHIA
PARK RIDGE IL 60068

PETERS,ELMER E FP 074
830 MAIN ST
BROOKVILLE IN 47012

PETERSON,ALLEN LELAND EM 230
PORTER MEMORIAL HOSP
VALPARAISO IN 46383

PETERSON,CHAS EDWARD CDS 258
211 NORTH EDDY STREET
SOUTH BEND IN 46617

PETERSON,DEWARD D R 298
221 S 6TH ST
TERRE HAUTE IN 47801

PETERSON,JAMES ARTHUR PD 070
303 S NAPPANEE ST
ELKHART IN 46514

PETERSON,JOHN CHAS FP 062
2200 W MC GALLIARD
MUNCIE IN 47304

PETERSON,RONALD L FP 190
116 E WASHINGTON ST
PLYMOUTH IN 46563

PETIT,JAMES M P 298
PO BOX 3252
TERRE HAUTE IN 47803

PETITJEAN,HAROLD GEO FP 094
R D 2
HAUBSTADT IN 47639

PETRANOFF,THEODORE V FP 134
2814 QUESTEND S DR
INDIANAPOLIS IN 46222

PETRASS,ANDREW FP 258
22027 LIBERTY HWY
SOUTH BEND IN 46601

PETRICH,PETER RICHARD FP 086
401 S PERRY ST
ATTICA IN 47918

PETRIN,THOS JOHN IM 134
7005 GROSVENOR PLACE
INDIANAPOLIS IN 46220

PETRY,THOS NEAL FP 026
110 S UNION ST
DELPHI IN 46923

PETTIS,ARTHUR GLASCO AN 174
7863 BROADWAY Z C
MERRILLVILLE IN 46410

PEYTON,FRANK WOOD OBG 286
2400 FERRY ST
LAFAYETTE IN 47904

PFAFF,DUDLEY A GYN 134
25 EAST 40TH ST APT 5-D
INDIANAPOLIS IN 46205

PFROMMER,JOHN R AM 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

PFUETZE,MAX ENSIGN OM 030
408 NORTH ST
LOGANSPORT IN 46947

PHARES,ROBT WESLEY AN 126
1712 S MALFALFA RD
KOKOMO IN 46901

PHELPS,JAMES MICHAEL R 286
4425 N 250 W
WEST LAFAYETTE IN 47906

PHELPS,STEPHEN ROWLES D 258
808 SHERLAND BLDG
SOUTH BEND IN 46601

PHILBROOK,SETH S OPH 178
705 HARRISON ST
LA PORTE IN 46350

PHILLIPS,DAVID LEE P 134
3561 N PENNSYLVANIA
INDIANAPOLIS IN 46205

PHILLIPS,DONALD MICHAEL FP 174
1356 S LAKE PARK
HOBART IN 46342

PHILLIPS,JOHN F PED 134
7150 SOUTH MADISON AVE
INDIANAPOLIS IN 46227

PHILLIPS,JOHN F 134
UH N 563
1100 WEST MICHIGAN
INDIANAPOLIS IN 46206

PHILLIPS,JOHN HARMON FP 178
1511 WABASH ST
MICHIGAN CITY IN 46360

PHILLIPS,RICHARD JAMES LEE GS 110
HANCOCK COUNTY HOSPITAL ER
GREENFIELD IN 46140

PHIPPS,LELAND K FP 246
R R 1 BOX 73
UNION CITY IN 47390

PICKEREL,JAMES W OPH 298
221 SOUTH 6TH STREET
TERRE HAUTE IN 47807

PICKERILL,JAMES MITCHELL FP 286
3005 GREENBUSH ST
LAFAYETTE IN 47904

PICKETT,MERLE ELMER AN 082
5800 FAIRFIELD AVE
FORT WAYNE IN 46807

PICKETT,ROBT O IM 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

PIERCE,EMMETT C PTH 134
BOX 708
GREENFIELD IN 46140

PIERCE,GENE STRATTON FP 078
112 PROF ARTS BLDG-1919 STATE
NEW ALBANY IN 47150

PIERCE,WM J PTH 046
DIAGNOSTIC CYTO CLINIC
BRUCEVILLE IN 47516

PIERCE,WM JOHN FP 174
915 W CHICAGO
EAST CHICAGO IN 46312

PIETZ,DAVID GEO GE 318
RR3
BLUFFTON IN 46714

PILE,STAFFORD WALLACE U 134
8109 BRAMWOOD COURT
INDIANAPOLIS IN 46250

PILECKI,PETER J FP 178
1225 E COOLSPRING AVE
MICHIGAN CITY IN 46360

PILLAI,VIJAYAN V GS 182
DUNN MEMORIAL HOSP
BEDFORD IN 47421

PILLAY,VIJAYAPRASANTHAN NS 174
SUITE 525
1000 EAST 80TH ST
MERRILLVILLE IN 46410

PILOT,JEAN PTH 174
7137 KNICKERBOCKER
HAMMOND IN 46323

PIPPENGER,JOS IRWIN FP 062
310 W JACKSON ST
MUNCIE IN 47305

PIPPENGER,WAYNE GRISE FP 042
1 WESTWOOD DR
FRANKFORT IN 46041

PITTMAN,JOHN NORMAN CDS 134
201 W 106TH ST
INDIANAPOLIS IN 46290

PITTS,NEAL CHASE RHU 318
303 S MAIN ST
BLUFFTON IN 46714

PIZZO,ANTHONY PTH 214
BLOOMINGTON HOSP
P O BOX 1149
BLOOMINGTON IN 47401

PLAIN,GEO L IM 258
1229 RIDGEDALE
SOUTH BEND IN 46614

PLAIN,GEO GS 258
SOUTH BEND CLINIC-211 N EDDY
SOUTH BEND IN 46617

PLANK,RICHARD S R 178
916 WASHINGTON ST
MICHIGAN CITY IN 46360

PLANTE,MICHAEL T OBG 286
2400 FERRY ST
LAFAYETTE IN 47904

PLASTERER,EDWARD DALE PO 314
1434 CHESTER BLVD
RICHMOND IN 47374

PLATIS,JAMES MARK PS 174
1000 E 80TH PL
MERRILLVILLE IN 46410

PLAUTZ,JOSEPH WHEELER OBG 134
650 NORTH GIRLS SCHOOL RD
INDIANAPOLIS IN 46224

PLESS,JOHN EDWARD PTH 214
BOX 1149
BLOOMINGTON HOSPITAL
BLOOMINGTON IN 47401

PLETCHER,WM DE WITT IM 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

PLOETNER,EDWARD JOS GS 066
MED ARTS BLDG 721 W 13TH ST
JASPER IN 47546

POEHLER,FREDERICK CHAS AN 302
WABASH COUNTY HOSP
WABASH IN 46952

POHNERT,WILLIAM H ORS 126
402 S BERKLEY RD
KOKOMO IN 46901

POLCZ,GYORGY GYULA OS 062
4604 CARDINAL DR
MUNCIE IN 47304

POLHEMUS,JAY KENT AN 186
3712 TIMBERVIEW COURT
ANDERSON IN 46011

POLHEMUS,WARREN C FP 186
1803 PEARL ST
ANDERSON IN 46016

POLITE,NICHOLAS LOUIS OBG 174
837 119TH ST
WHITING IN 46394

POLLACK,SEYMOUR LESTER N 122
511 EDGEWOOD DR
NEW CASTLE IN 47362

POLLOM,STEPHEN H 134
3266 N MERIDIAN ST
INDIANAPOLIS IN 46202

POLYDEFKIS,DIMITRI GEO P 174
509 RIDGE RD
MUNSTER IN 46321

PONCHER,JOHN ROBERT PD 230
1101 E GLENDALE BLVD
VALPARAISO IN 46383

PONTADE,ALEJANDRO GARCIA P 296
613 WEINBACH AVE
EVANSVILLE IN 47714

PONTIUS,EDWIN EUGENE PTH 134
METHODIST HOSP
INDIANAPOLIS IN 46202

POOLITSAN,GEO CHRIS IM 214
907 W 2ND ST
BLOOMINGTON IN 47401

POPE,HOWARD A FP 078
1919 STATE ST SUTE 205
NEW ALBANY IN 47150

POPLAWSKI,HENRY FP 178
202 MARQUETTE MALL BLDG
MICHIGAN CITY IN 46360

POPPLEWELL,ARVINE G PUD 134
6555 GLACIER DR
INDIANAPOLIS IN 46217

PORACKY,BERNARD F R 230
OGDEN DUNES
148 SHORE DR BOX 639
PORTAGE IN 46368

PORAPAIBOON,VEERA TS 174
6600 FILMORE
MERRILLVILLE IN 46410

PORRO,FRANCIS WALTHOUR PTH 296
3700 WASHINGTON AVE
EVANSVILLE IN 47715

PORTER,CARL MORGAN FP 102
124 COOK ST
JASONVILLE IN 47438

PORTER,DAVID H 082
604 WEST BERRY
FORT WAYNE IN 46802

PORTER,FREDERICK H 014
2760 25TH STREET
COLUMBUS IN 47201

PORTER,GEO SETH OBG 314
900 SIM HODGIN PKWY
RICHMOND IN 47374

PORTER,JOHN R FP 022
1122 N LEBANON
LEBANON IN 46052

PORTER,ROBT A FP 246
700 BROWNE ST
WINCHESTER IN 47394

PORTNEY,FRED R U 174
7905 CALUMET AVE
MUNSTER IN 46321

POTTER,BRIAN S O 178
1225 E COOLSPRING
MICHIGAN CITY IN 46360

POTTI,T K KRISHNAN IM 174
8300 BROADWAY
MERRILLVILLE IN 46410

POTTS,DAVID R OBG 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

POULIN,THOS LOVELAND 258
720 EAST CEDAR
SOUTH BEND IN 46617

POULOS,JAMES THOS END 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

POULOS,WARD ELIAS PD 134
3500 LAFAYETTE RD
INDIANAPOLIS IN 46222

POWELL,JAMES PAXTON GS 098
500 WABASH AVE
MARION IN 46952

POWELL,MELVIN JACK R 082
700 BROADWAY
FORT WAYNE IN 46802

POWELL,RICHARD CINCLAIR END 134
5359 HEDGEROW DR
INDIANAPOLIS IN 46226

POWERS,PAUL CHAS GS 062
2108 WEST MC GALLIARD ROAD
MUNCIE IN 47304

POWERS,WM RAY FP 102
LYONS CLINIC
LYONS IN 47443

PRATHER,PHILIP E FP 126
123 MAGNOLIA
KOKOMO IN 46901

PRATT,GEORGE B R 134
320 RAINTREE DR
ZIONSVILLE IN 46077

PRATT,RALPH MARTIN PTH 150
2325 BLACKMORE PL
MADISON IN 47250

PREDD,ADOLPH C FP 178
909 MADISON ST
LA PORTE IN 46350

PREDD,FLORIAN MARTIN GS 178
5982 WEST JOHNSON ROAD
LA PORTE IN 46350

PREDEY,THOS FP 174
110 RIDGE RD
MUNSTER IN 46321

PREMUDA,FRANKLIN FRED EM 174
7042 WOODMAR AVE
HAMMOND IN 46323

PRESENT,JULIAN D FP 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

PRIBBLE,ROBT HOWARD PTH 134
5717 ROXBURY CIR
INDIANAPOLIS IN 46226

PRICE,AMBROSE MADISON FP 186
1431 N MADISON AVE
ANDERSON IN 46012

PRICE,DAVID WILDE GS 134
8330 NAAB ROAD
INDIANAPOLIS IN 46260

PRICE,FRANCIS W OM 134
745 FOREST BLVD
ZIONSVILLE IN 46077

PRICE,FRANCIS WM OPH 134
5355 NORTH KENWOOD AVE
INDIANAPOLIS IN 46208

PRICE,GERALD L 296
2317 S ST JAMES BLVD
EVANSVILLE IN 47714

PRICE,JAMES OWEN GS 134
6433 PARK CENTRAL DR W
INDIANAPOLIS IN 46260

PRICE,ROBT WHITCRAFT P 070
2600 OAKLAND AVE
ELKHART IN 46514

PRICE,SHIRLEY G GS 296
421 CHESTNUT ST
EVANSVILLE IN 47713

PRIDDY,MARVIN EUGENE FP 082
5110 N CLINTON
FORT WAYNE IN 46825

PRIMUS,ROMANA R A 258
720 EAST CEDAR
SOUTH BEND IN 46617

PROBST,EDWARD LOUIS D 014
360-C PLAZA DRIVE
TIPTON PARK PLAZA
COLUMBUS IN 47201

PROCHOROFF,NICHOLAS OBG 134
650 N GIRLS SCHOOL RD
INDIANAPOLIS IN 46224

PROUDFIT,CHAS H GYN 258
919 E JEFFERSON ST
SOUTH BEND IN 46622

PROUGH,WENDELL ARTHUR OPH 318
611 W MARKET ST
BLUFFTON IN 46714

PROVINCE,WM DITMARS IM 158
100 N MAIN ST
FRANKLIN IN 46131

PRUITT,DON E R 094
RR 8 BOX 144
EVANSVILLE IN 47711

PRUITT,JACOB E FP 174
540 TYLER ST
GARY IN 46402

PRYOR,RICHARD C FP 134
6111 N COLLEGE AVE
INDIANAPOLIS IN 46220

PUGH,NEWELL OSTEEN — 134
1604 N CAPITOL AVENUE
INDIANAPOLIS IN 46202

PUGH,WM ROBT — OTO — 214
115 S LINCOLN
BLOOMINGTON IN 47401

PULCINI,JOHN DENNIS — PS — 296
3700 BELLEMEADE AVE STE 203
EVANSVILLE IN 47715

PULIDO,DAVID R — GS — 178
910 WASHINGTON STREET
MICHIGAN CITY IN 46360

PULLMAN,GEO R — R — 166
1031 COUNTRY CLUB LANE
WARSAW IN 46580

PURCELL,LAWRENCE T — U — 318
303 S MAIN ST
BLUFFTON IN 46714

PURCELL,RICHARD J — FP — 174
109 EAST LAKE STREET
GRIFFITH IN 46319

PUTERBAUGH,KARL E — FP — 062
RAINTREE ESTATES 31 G
DALEVILLE IN 47334

PYLE,HAROLD O — PD — 258
14432 ARROWHEAD COURT
SUN CITY AZ 85351

PYLE,SUSAN K — FP — 246
1150 N COLUMBIA ST
UNION CITY IN 47390

QARNAIN,SYED F — P — 174
SOUTHLAKE COMM M H C INC
MERRILLVILLE IN 46410

QAZI,HAROON MOHAMMAD — PS — 134
1944 NORTH CAPITOL AVE
INDIANAPOLIS IN 46202

QUAKENBUSH,JOHN PHILLIP — FP — 126
3421 S LA FOUNTAINE
KOKOMO IN 46901

QUICK,WM JOS — FP — 062
R R 11 BOX 195 MOORE ROAD
MUNCIE IN 47302

QUIGLEY,GEO JOS — OPH — 134
5506 EAST 16TH ST SUITE 17
INDIANAPOLIS IN 46218

QUIGLEY,JOS WM — FP — 134
6320 NORTH FERGUSON
INDIANAPOLIS IN 46220

QUILTY,THOS JAMES — OTO — 070
112 E MADISON ST
GOSHEN IN 46526

QUINN,MICHAEL GERALD — PTH — 258
531 N MAIN ST
SOUTH BEND IN 46601

QUIROZ,JORGE A — GS — 306
25928 SIERRA DR
NOVI MI 48050

QUISUMBING,REMEDIOS E — P — 314
RICHMOND STATE HOSPITAL
RICHMOND IN 47374

RABASA,RAFAEL — FP — 258
303 S MAIN ST SUITE 103
MISHAWAKA IN 46544

RABB,HARRY SOLOMON — OS — 134
ROUTE 1 BOX 181D
NINEVEH IN 46164

RABELO,JOHN SEGUNDO — AN — 230
BOX 96
BEVERLY SHORES IN 46301

RABER,ROBT M — PS — 134
3266 NORTH MERIDIAN ST NO 605
INDIANAPOLIS IN 46208

RABIN,RONALD PHILIP — U — 296
SUITE NO 504
611 HARRIET ST
EVANSVILLE IN 47710

RADCLIFF,FORREST F — ORS — 296
801 ST MARY'S DR SUITE 509
P O BOX 5266
EVANSVILLE IN 47715

RADCLIFFE,LEE EWING — P — 286
2464 SYCAMORE LN
WEST LAFAYETTE IN 47906

RADEMACHER,WADE — ORS — 134
1500 ALBANY ST
BEECH GROVE IN 46107

RADER,MICHAEL R — 062
2401 UNIVERSITY AVE
BALL MEMORIAL HOSPITAL
MUNCIE IN 47303

RADPOUR,SHOKRI — OTO — 126
315 S BERKLEY RD
KOKOMO IN 46901

RAGAN,WM D — OBG — 134
11416 LAKESHORE DRIVE E
CARMEL IN 46032

RAHDERT,RICHARD F — CHP — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

RAHMAN,SHEIKH ABDUL — US — 050
605 WILSON CREEK RD
LAWRENCEBURG IN 47025

RAHMANY,MOHAMMAD ASEF — FP — 174
4321 FIR ST
EAST CHICAGO IN 46312

RAI,SWAROOP — CD — 066
P O BOX 269
MEDICAL ARTS PLAZA
HUNTINGBURG IN 47542

RAINS,DANIEL P FP 062
2300 WEST GILBERT
MUNCIE IN 47303

RAJU,GOPAL S GS 098
219 E WASHINGTON
FAIRMOUNT IN 46928

RAK,RICHARD ALAN NS 214
619 WEST FIRST ST
BLOOMINGTON IN 47401

RALSTON,MARC ALLEN OPH 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

RAMAGE,WALTER FRANCIS FP 134
5440 SHELBYVILLE RD
INDIANAPOLIS IN 46227

RAMAPRAKASH,H N OBG 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

RAMASWAMY,C P ORS 306
TREMONT BUILDING
SOUTH PLAZA DRIVE
NEWBURGH IN 47630

RAMKER,DANL THEODORE GS 174
7040 KENNEDY ST
HAMMOND IN 46323

RAMOS,JAIME GUTIERREZ FP 090
R R 2 BOX 12A
ROCHESTER IN 46975

RAMOS,LEONARDO POSADAS FP 034
BORDEN IN 47106

RAMP,JERREMY M 134
3266 N MERIDIAN ST
INDIANAPOLIS IN 46208

RAMSDELL,GLEN AUSTIN PUD 314
1200 CHESTER BLVD
RICHMOND IN 47374

RAMSEY,FRANK BANTA GS 134
1401 WEST 52ND ST
INDIANAPOLIS IN 46208

RAMSEY,GEO FRANK IM 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

RAMSEY,HUGH SMITH FP 214
420 E FIRST ST
BLOOMINGTON IN 47401

RAMSEY,JOHN EDWARD FP 206
P O BOX 707
U S HIGHWAY 6 WEST
KENDALLVILLE IN 46755

RAMSEY,PAUL L ORS 186
1431 N MADISON AVE SUITE 2
ANDERSON IN 46012

RANCK,BENJ ALBERT FP 014
2600 SANDCREST BLVD
COLUMBUS IN 47201

RANDOLPH,JOSEPH C ORS 134
9045 KIRKHAM CT
INDIANAPOLIS IN 46260

RANEY,BEN BUTLER AN 102
129 E VINCENNES ST
LINTON IN 47441

RANEY,ROBT DONALD IM 298
1024 S 6TH ST
TERRE HAUTE IN 47802

RANG,ROBT HALTER GS 046
300 NE 14TH
WASHINGTON IN 47501

RANGASWAMI,R PD 034
645 EASTERN BLVD
CLARKSVILLE IN 47130

RANK,WM BENJ U 082
3030 LAKE
FORT WAYNE IN 46805

RANSDELL,ROBERT W PD 296
SUITE 502
801 ST MARYS DR
EVANSVILLE IN 47750

RAO,CHALAPATHI C AN 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

RAPP,GEORGE F ORS 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

RASCH,GEO C GS 174
1644-45TH AVE SUITE C
MUNSTER IN 46321

RASH,JAMES R OBG 296
3700 WASHINGTON AVE
ST MARYS HOSPITAL
EVANSVILLE IN 47750

RASMUSSEN,RUTH FRANCES PTH 258
211 N EDDY ST
SOUTH BEND IN 46617

RATCLIFF,FRANK WM AN 286
1000 WEA AVE
LAFAYETTE IN 47905

RATCLIFFE,A WAYNE PTH 296
201 SOUTH CULLEN AVE
EVANSVILLE IN 47715

RATTS,LARRY DEAN FP 214
717 WEST FIRST ST
BLOOMINGTON IN 47401

RAU,CHAS ALBERT FP 014
2600 SANDCREST BLVD
COLUMBUS IN 47201

RAUH,ROBT A FP 302
400 ASH
WABASH IN 46992

RAUSCH,JAMES M R 082
2200 LAKE AVENUE
FORT WAYNE IN 46805

RAUSCH,NORMAN W FP 278
310 NORTH WAYNE
ANGOLA IN 46703

RAVINDRAN,RAMASWAMY AN 134
7731 TRADERS COVE LN
INDIANAPOLIS IN 46234

RAWLINS,CAROLYN N MANN OBG 174
7550 HOHMAN AVE
MUNSTER IN 46321

RAWLINS,STEVEN JOE R 174
6111 HARRISON ST
MERRILLVILLE IN 46410

RAWLS,GEO HOSEA GS 134
3151 N ILLINOIS ST
INDIANAPOLIS IN 46208

RAY,ALAN S R 186
1728 WILLIAMS WAY
ANDERSON IN 46011

RAY,CARL STEWART OM 134
M O BOX 1976
% RCA
INDIANAPOLIS IN 46206

RAY,JAMES ANTHONY FP 214
321 W 2ND ST
BLOOMINGTON IN 47401

RAY,JOANNE P TRIXLER PD 186
2101 JACKSON STREET
ANDERSON IN 46011

RAYES,JOS LUKE HASSAN GS 094
1814 SHERMAN DR
PRINCETON IN 47670

RAYMUNDO,LUCIANO CABATE ORS 174
800 MACARTHUR BLVD
MUNSTER IN 46321

RAYMUNDO,VIVENCIO F GS 186
1515 SOUTH F ST
ELWOOD IN 46036

RAZEK,ALY A 296
801 ST MARY'S DRIVE-SUITE 301
EVANSVILLE IN 47715

REA,RALPH LEWIS FP 110
120 W MC KENZIE RD
GREENFIELD IN 46140

READ,JOHN E OPH 230
229 EAST MORGAN AVE
CHESTERTON IN 46304

RECEVEUR,PAUL E FP 078
2626 CHARLESTON RD
NEW ALBANY IN 47150

RECEVEUR,ROBT LEWIS FP 078
2626 CHARLESTOWN RD
NEW ALBANY IN 47150

RECINTO,ANTONIO RECIO CHP 134
8060 KNUE ROAD
CASTLETON PROF CENTER
INDIANAPOLIS IN 46250

RECOMETA,OSCAR DURAN OBG 098
PO BOX 746
MARION IN 46952

RECORDS,JOHN MERRITT FP 158
198 E JEFFERSON ST
FRANKLIN IN 46131

REDDY,RAMACHANDRA K DR 134
UNIVERSITY HEIGHTS HOSP
3350 CARSON AVE DEPT RADIOLOGY
INDIANAPOLIS IN 46227

REDDY,RAMANA 298
3050 POPLAR ST
TERRE HAUTE IN 47803

REECK,CLAUDE C ORS 134
8220 NAAB ROAD
INDIANAPOLIS IN 46260

REED,DONALD WAITE P 110
1305 SHERWOOD DR
GREENFIELD IN 46140

REED,EDSEL SHERWOOD R 034
1220 MISSOURI AVE
JEFFERSONVILLE IN 47130

REED,JAMES CHILTON D 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

REED,JAY ALLEN FP 106
330 N MILLCREEK RD
NOBLESVILLE IN 46060

REED,JOHN DAVID IM 082
3124 E STATE BLVD
FORT WAYNE IN 46805

REED,JOHN JOS FP 174
10 N MICHIGAN AVE
HOBART IN 46342

REED,PHILIP BYRON P 134
540 8TH ST SOUTH
ST PETERSBURG FL 33701

REED,ROBT CECIL AN 298
UNION HOSPITAL
TERRE HAUTE IN 47808

REED,ROBT F FP 258
1316 LINCOLN WAY E
MISHAWAKA IN 46544

REED,ROBT G PTH 014
2400 E 17TH ST
COLUMBUS IN 47201

REED,ROBT G CD 134
1303 N ARLINGTON AVE
INDIANAPOLIS IN 46219

REED,ROGER ROLLIN ORS 186
1415 RAIBLE AVE
ANDERSON IN 46011

REED,RONALD RILEY IM 174
2450 169TH ST
HAMMOND IN 46323

REED,THOS EVAN FP 134
120 W MARKET STREET
INDIANAPOLIS IN 46204

REEDY,RICHARD LEE FP 062
1003 E SMITH ST
YORKTOWN IN 47396

REEDY,STANLEY GENE PH 070
423 PROSPECT
ELKHART IN 46514

REES,RUSSEL C FP 134
6114 E WASHINGTON ST
INDIANAPOLIS IN 46219

REGENSTREIF,I J OPH 134
77 S GIRLS SCHOOL RD
INDIANAPOLIS IN 46231

REHME,CHRISTOPHER D 134
5405 KILMER LANE
INDIANAPOLIS IN 46250

REHN,CHARLES EDGAR N 134
3130 NORTH MERIDIAN STREET
INDIANAPOLIS IN 46208

REICH,CLARENCE E FP 296
1209 N FULTON AVE
EVANSVILLE IN 47710

REID,CHAS ALBERT FP 134
2445 SHELBY ST
INDIANAPOLIS IN 46203

REID,DONALD BRAIDWOOD FP 326
2 HALLMARK SQUARE
COLUMBIA CITY IN 46725

REID,JAMES DONALD OPH 098
513 NORTH RIVER DRIVE
MARION IN 46952

REID,ROBT M OS 014
MEDI TECH
2346 S LYNHURST SUITE F 101
INDIANAPOLIS IN 46241

REID,ROBT WM OS 246
726 W DIVISION ST
UNION CITY IN 47390

REIDY,JAMES EDWARD 258
16569 BENNINGTON CT
GRANGER IN 46530

REILLY,ROBERT NEIL FP 062
2809 GODMAN AVE
SUITE 6
MUNCIE IN 47304

REIMERS,ROGER ALLEN R 214
P O BOX 1149
BLOOMINGTON IN 47401

REINEKE,JAN RICHARD OBG 258
912 E LA SALLE
SOUTH BEND IN 46617

REISS,WARREN K FP 190
921 LAKE SHORE DR
CULVER IN 46511

REITMAN,PAUL HENRY R 174
4321 FIR ST
EAST CHICAGO IN 46312

REITZ,LAWRENCE ALBERT FP 134
RR 4 STATE ROAD 334 W
ZIONSVILLE IN 46077

REMICH,ANTONE CHAS OM 174
7905 CALUMET AVE
MUNSTER IN 46321

REMO,JOHN WM DR 286
DMI INC P O BOX 1521
LAFAYETTE IN 47902

RENDEL,DONALD T PD 174
513 RIDGE RD
MUNSTER IN 46321

RENDEL,HAROLD EUGENE FP 194
R R 3
PERU IN 46970

RENDEL,JEFFRY CHAS EM 066
MEDICAL ARTS BLDG
JASPER IN 47546

RENNE,JAMES WILLIAM ORS 296
421 CHESTNUT ST
EVANSVILLE IN 47713

REPAY,WALTER ALLEN FP 174
513 RIDGE RD
MUNSTER IN 46321

REPPERT,ROLAND LE ROY FP 010
ROAD 224
DECATUR IN 46733

RESS,GENE EDWIN FP 222
PROFESSIONAL BLDG
TELL CITY IN 47586

RESZEL,PAUL A ORS 082
5050 N CLINTON ST
FORT WAYNE IN 46825

RETTIG,ARTHUR CHAS ORS 134
8402 HARCOURT ROAD
INDIANAPOLIS IN 46260

REUL,GEO MARVIN FP 126
6401 WINDWOOD DR
KOKOMO IN 46901

REUTER,JOHN WESLEY OPH 182
R R NO 18 BROOK KNOLL
BEDFORD IN 47421

REYES,ANGEL I EM 174
1450 E 55TH PL APT 918 SOUTH
CHICAGO IL 60637

REYES,BIENVENIDO CASTRO IM 134
5201 NORTH ILLINOIS ST
INDINAPOLIS IN 46208

REYES,DIEGO CASTOR FP 194
29 EAST MAIN ST
PERU IN 46970

REYES,NESTOR C US 134
SOUTHERN CLINIC
NEW WHITELAND IN 46184

REYES,ORDONIO J GS 254
206 W 1ST ST
RUSHVILLE IN 46173

REYNOLDS,JOHN L ORS 202
1630 SOUTH OHIO STREET
MARTINSVILLE IN 46151

REYNOLDS,PAUL DELBERT FP 158
597 W JEFFERSON ST
FRANKLIN IN 46131

REYNOLDS,RALPH EDWARD AN 186
RR 1 BOX 53 APT 203
DALEVILLE IN 47334

REYNOLDS,RICHARD J IM 298
650 IDAHO ST
TERRE HAUTE IN 47802

REZVAN,NADER AN 214
300 1/2 W FIRST ST
BLOOMINGTON IN 47401

RHAMY,ARTHUR P U 098
RR 5
WABASH IN 46992

RHAMY,DONALD EUGENE U 098
P O BOX 987
MARION IN 46952

RHEE,SAE YUNG IM 134
1919 NORTH CAPITOL AVENUE
INDIANAPOLIS IN 46202

RHEE,SANG KEE AN 082
2827 ROSCOMMON
FORT WAYNE IN 46805

RHEINHEIMER,FLOYD L FP 070
BOX 128
MILFORD IN 46542

RHOADS,PAUL SPOTTSWOOD IM 314
100 N 15TH ST
RICHMOND IN 47374

RHODES,ALFRED KEITH OBG 050
370 BIELBY RD
LAWRENCEBURG IN 47025

RHODES,RONALD NESBITT PD 230
1101 EAST GLENDALE
VALPARAISO IN 46383

RHORER,JOHN GILBERT FP 098
106 PROF ARTS CENTER
MARION IN 46952

RHYNEARSON,HAL ROBT FP 110
110 W STAAT ST
FORTVILLE IN 46040

RHYNEARSON,WM ROBT FP 110
110 W STAAT ST
FORTVILLE IN 46040

RICE,FREDERIC A FP 134
7017 PENDLETON PIKE
INDIANAPOLIS IN 46226

RICE,KATHERINE KEMPNER P 258
919 EAST JEFFERSON BLVD
SOUTH BEND IN 46622

RICE,PAUL HERMAN N 014
411 PLAZA DR SUITE H
TIPTON PARK PLAZA
COLUMBUS IN 47201

RICE,RAYMOND DALTON OBG 134
2020 W 86TH ST
INDIANAPOLIS IN 46260

RICE,RAYMOND M OS 134
3430 GULF SHORE BLVD
N APT 4A
NAPLES FL 33940

RICE,RONALD B IM 134
2010 W 86TH ST
INDIANAPOLIS IN 46260

RICH,NORVAL S US 010
230 S 2ND ST
DECATUR IN 46733

RICH,RICHARD BUDGE OPH 134
CASTLETON PROF CENTER
8060 KNUE RD SUITE 228
INDIANAPOLIS IN 46250

RICHARD,NORMAN FREDRIC ABS 278
RR5 BOX 828 LAKE JAMES
ANGOLA IN 46703

RICHARDS,ALAN DANL EM 082
RR 2 BOX 92
ROANOKE IN 46783

RICHARDS,DEAN ALLEN FP 258
3123 S MICHIGAN ST
SOUTH BEND IN 46614

RICHARDS,EDGAR ELVIN FP 198
P O BOX 182
RUSSELLVILLE IN 46175

RICHARDSON,JOS DOWNS FP 090
121 W 8TH ST
ROCHESTER IN 46975

RICHARDSON,JOS HILL — IM — 082
3010 E STATE BLVD
FORT WAYNE IN 46805

RICHART,JAMES VERNON — FP — 298
336 HAMILTON DR
TERRE HAUTE IN 47803

RICHEY,ROBT WM — OBG — 214
1606 WOODRUFF LANE
BLOOMINGTON IN 47401

RICHMOND,HAROLD WAYNE — OM — 014
605 COTTAGE AVE
COLUMBUS IN 47201

RICHTER,ARTHUR B — CD — 134
8872 WESTFIELD BLVD
INDIANAPOLIS IN 46240

RICHTER,JOHN CARL — GS — 178
900 I ST
LA PORTE IN 46350

RIDER,PAUL STEVEN — PD — 314
1434 CHESTER BLVD
RICHMOND IN 47374

RIDGE,FREDERICK RAY — FP — 134
HARRISON DRIVE
CORYDON IN 47112

RIDGWAY,ALTON H — FP — 186
631 MAIN ST
LAPEL IN 46051

RIDOLFO,ANTHONY S — RHU — 134
RR1 BOX 121
ZIONSVILLE IN 46077

RIEGER,IRWIN TAYLOR — U — 214
711 W 2ND ST
BLOOMINGTON IN 47401

RIEHL,RICHARD EMIL — IM — 034
201 E MARKET ST
JEFFERSONVILLE IN 47130

RIESER,ALOYS MARTIN — CLP — 174
ST ANTHONY MED CENTER
CROWN POINT IN 46307

RIETMAN,H JEROME — P — 296
715 1ST AVE
EVANSVILLE IN 47710

RIFNER,EUGENE SYMONS — FP — 098
301 E VINE ST
VAN BUREN IN 46991

RIGAUX,ARMAND JULES — FP — 258
150 W ANGELA
SOUTH BEND IN 46617

RIGG,JOHN FLOYD — PH — 134
131 GULFSTREAM RD
NORTH PALM BEACH FL 33403

RIGGS,FLOYD C — FP — 298
137 S 24TH ST
TERRE HAUTE IN 47803

RIGGS,WENDELL A — PD — 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

RILEY,HENRY SCHIRMER — FP — 150
722 W MAIN ST
MADISON IN 47250

RILEY,PAUL DAVID — P — 134
5944 NORTH CENTRAL AVE
INDIANAPOLIS IN 46220

RILEY,THOS WAYNE — U — 134
3530 SOUTH KEYSTONE AVE
INDIANAPOLIS IN 46200

RIMEL,JAMES FLOYD — GS — 190
1223 N CENTER ST
PLYMOUTH IN 46563

RINER,JACK KEITH — GS — 134
6339 LANDBOROUGH SOUTH DR
INDIANAPOLIS IN 46220

RINGER,WM ALFRED — FP — 086
23 FALL ST
WILLIAMSPORT IN 47993

RINK,LAWRENCE DONALD — IM — 214
419 WEST FIRST STREET
BLOOMINGTON IN 47401

RIORDAN,JOHN F — AN — 230
120 FAIRVIEW AVE
VALPARAISO IN 46383

RIPLEY,JOHN WM — FP — 138
321 BRUCE ST
SEYMOUR IN 47274

RIPPERGER,STEVEN GREG — OBG — 296
421 CHESTNUT
EVANSVILLE IN 47713

RISSING,WALTER JOS — CRS — 082
3200 IRVINGTON
FORT WAYNE IN 46805

RITCHEY,JAMES OSCAR — IM — 134
43 W 43RD ST
INDIANAPOLIS IN 46208

RITCHIE,WM DUDLEY — FP — 296
567 OLMSTEAD
EVANSVILLE IN 47711

RITTER,MERRILL A — ORS — 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

RITTER,WAYNE LOCKWOOD — IM — 134
1556B CONSOLIDATED BLDG
INDIANAPOLIS IN 46204

RITTMEYER,JOHN LOUIS — IM — 062
1309 RIDGE RD
MUNCIE IN 47304

RITZ,ALBERT SYLVESTER — GS — 296
4416 E VOGEL RD
EVANSVILLE IN 47715

RIVERA,FELICIDAD BALIDO — AN — 178
1511 WABASH STREET
MICHIGAN CITY IN 46360

RIVERA,FERNANDO H — FP — 174
2250 RIPLEY ST
GARY IN 46405

RIVERA,HECTOR P — PTH — 134
8911 SPICEWOOD COURT
INDIANAPOLIS IN 46260

RIVERA,JULIUS PEREGRINO — GS — 178
3714 FRANKLIN
MICHIGAN CITY IN 46360

ROACH,EUGENE GAYLE — P — 134
IU HOSPITAL
1100 WEST MICHIGAN SUITE N 604
INDIANAPOLIS IN 46202

ROBB,JOHN ALTON — R — 134
5151 N PENNSYLVANIA
INDIANAPOLIS IN 46205

ROBBINS,GORDON THOS — FP — 134
100 NORTH NINTH STREET
ZIONSVILLE IN 46077

ROBBINS,LEWIS C — GPM — 134
1604 N CAPITOL AVE
INDIANAPOLIS IN 46202

ROBERTO,BENJ V — FP — 262
378 W MAIN ST
AUSTIN IN 47102

ROBERTS,BILLY JOE — FP — 258
3123 MISHAWAKA AVE
SOUTH BEND IN 46615

ROBERTS,DANIEL B — GS — 194
27 WEST 6TH ST
PERU IN 46970

ROBERTS,THOMAS K — FP — 114
HARRISON DRIVE
CORYDON IN 47112

ROBERTS,WARREN CHAS — OM — 134
BOX 1104
INDIANAPOLIS IN 46206

ROBERTSON,ADDIS NEAT — FP — 078
25 OXFORD DRIVE
NEW ALBANY IN 47150

ROBERTSON,JAMES A — PTH — 296
7209 E WALNUT
EVANSVILLE IN 47715

ROBERTSON,JAMES STEWART — FP — 190
304 N WALNUT ST
PLYMOUTH IN 46563

ROBERTSON,ROBT E — FP — 034
110 S NEW ALBANY ST
SELLERSBURG IN 47172

ROBERTSON,WM CARL — AN — 230
5 OAK DR DUNE ACRES
CHESTERTON IN 46304

ROBERTSON,WM SIMON — OS — 122
213 W MAIN ST
SPICELAND IN 47385

ROBINSON,EARLE URIAH — OBG — 134
3351 N MERIDIAN STE 200
INDIANAPOLIS IN 46208

ROBINSON,FREDERICK CHAS — N — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

ROBINSON,LAYNE D — FP — 296
421 CHESTNUT STREET
EVANSVILLE IN 47713

ROBINSON,NAN ELIZABETH — PD — 078
1726 STATE
NEW ALBANY IN 47150

ROBINSON,ROBT DAWSON — CD — 134
2001 W 86TH ST
ST VINCENT HOSP
INDIANAPOLIS IN 46260

ROBINSON,ROBT JOHN — FP — 134
534 TURTLE CREEK N DR STE C4
INDIANAPOLIS IN 46227

ROBINSON,WILLIAM H — 296
OUTER LINCOLN AVE
EVANSVILLE STATE HOSPITAL
EVANSVILLE IN 47715

ROBY,ALMA LEE — PD — 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

ROCH,L MARSHALL — OPH — 062
308 WHITE RIVER BLVD
MUNCIE IN 47303

ROCHLIN,ISIDORE — IM — 134
212 EAST 71ST ST
INDIANAPOLIS IN 46220

RODRIGUEZ,PEDRO CLAVERIA — FP — 314
REID MEMORIAL HOSP
RICHMOND IN 47374

RODWAY,JOHN SPENCER — FP — 014
605 COTTAGE AVE
COLUMBUS IN 47201

ROE,DAVID G — 098
109 PROFESISIONAL ARTS CTR
500 WABASH AVE
MARION IN 4695

ROE,TAFT WM — OTO — 296
3700 BELLEMEADE NO 101
EVANSVILLE IN 47715

ROEGNER,DONALD LEE — CHP — 126
3807 B SOUTHLAND AVE
KOKOMO IN 46901

ROESCH,RYLAND PAUL — AN — 134
5439 SHOREWOOD DR
INDIANAPOLIS IN 46220

ROESKE,NANCY C ARNOLD CHP 134
6815 N PENNSYLVANIA
INDIANAPOLIS IN 46220

ROGERS,DONALD B P 150
MADISON STATE HOSP
MADISON IN 47250

ROGERS,DONALD LEE PD 134
3426 N MERIDIAN ST
INDIANAPOLIS IN 46208

ROGERS,ROBERT E OBG 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

ROGERS,ROBT SHIRRELL FP 298
1101 S 6TH ST
TERRE HAUTE IN 47802

ROGERS,THOS PERRETTE P 134
6142 LA PINTURA DR
LA JOLLA CA 92037

ROGGE,JAMES DELBERT NM 134
1500 ALBANY AVE # 1110
BEECH GROVE IN 46107

ROGGENKAMP,MILTON W PTH 286
144 ARROWHEAD DR
WEST LAFAYETTE IN 47906

ROHN,ROBT J HEM 134
INDIANA UNIV MEDICAL CENTER
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

ROHRER,BRYCE BARTON FP 258
R R 1 BOX 423
WALKERTON IN 46574

ROHRER,JAMES ROBT AN 046

ELNORA IN 47529

ROIG,JOSE HUGE OPH 174
8500 S BROADWAY
MERRILLVILLE IN 46410

ROLD,JAMES F R 296
801 ST MARY'S DRIVE
EVANSVILLE IN 47715

ROLLER,MAC C FP 158
1551 N MAIN ST
FRANKLIN IN 46131

ROLLEY,RONALD T GS 286
2600 GREENBUSH
LAFAYETTE IN 47901

ROLLINS,THOS K FP 214
822 WEST FIRST ST SUITE 3
BLOOMINGTON IN 47401

ROMAIN,LOUIS FRANK N 082
3124 E STATE BLVD STE 13
FORT WAYNE IN 46805

ROMBERGER,FLOYD T OBG 134
10 WEST 64TH ST
INDIANAPOLIS IN 46260

ROMICK,BRUCE W U 296
611 HARRIET
EVANSVILLE IN 47710

ROOF,ROGER SAML FP 242
209 E SEMINARY ST
GREENCASTLE IN 46135

ROOSE,LISLE WADE FP 070
357 N NAPPANEE ST
NAPPANEE IN 46550

ROPP,HAROLD EDWARD FP 234

NEW HARMONY IN 47631

ROS,GEORGE A GS 166
827 S UNION ST
WARSAW IN 46580

ROSARIO,MANUEL ZARAGOZA PTH 174
9500 WHITE OAK
MUNSTER IN 46321

ROSE,ROBT E FP 214
792 EAST MORGAN ST
SPENCER IN 47460

ROSEFF,MARTIN H OTO 298
999 KNIGHT DRIVE RR 22
TERRE HAUTE IN 47802

ROSEN,IRWIN CHAS AN 074
1941 VIRGINIA AVE
CONNERSVILLE IN 47331

ROSENAK,BERNARD DAVID GE 134
1815 N CAPITOL SUITE 512
INDIANAPOLIS IN 46202

ROSENBAUM,IRVING PD 134
401 E 34TH ST
INDIANAPOLIS IN 46205

ROSENBAUM,LLOYD E CD 186
647 CITIZEN BK BLDG
ANDERSON IN 46016

ROSENBERG,GABRIEL JOS PD 134
1604 N CAPITOL AVE
INDIANAPOLIS IN 46202

ROSENBLATT,BERNARD B FP 296
502 HULMAN BUILDING
EVANSVILLE IN 47708

ROSENBLOOM,PHILIP JACK PH 174
1745 NORTH MANSORD BLVD
GRIFFITH IN 46319

ROSENE,HAROLD A ORS 298
25 WOODRIGE DRIVE
TERRE HAUTE IN 47803

ROSENHEIMER,GEO MILTON AN 258
1425 EAST WOODSIDE ST
SOUTH BEND IN 46614

ROSENTHAL,CARL R 174
25 DOUGLAS ST
HAMMOND IN 46320

ROSENWASSER,JACOB IM 258
834 LINCOLN WAY EAST
MISHAWAKA IN 46544

ROSEVEAR,HENRY JOS GS 174
110 RIDGE RD
HAMMOND IN 46321

ROSS,BEN RICHARDSON OS 214
4425 WEST OLD ST ROAD 37
BLOOMINGTON IN 47401

ROSS,DAVID EUGENE FP 174
2318 W 5TH AVE
GARY IN 46404

ROSS,EDWARD CD 134
3901 N MERIDIAN ST SUITE 442
INDIANAPOLIS IN 46208

ROSS,GLENN ELRICK GER 046
1210 BEDFORD RD
WASHINGTON IN 47501

ROSS,GUY EVERETT PD 186
1931 BROWN ST
ANDERSON IN 46014

ROSS,STEVEN EDWARD FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

ROTH,BERTRAM STANLEY PD 134
6434 NORTH COLLEGE AVE
INDIANAPOLIS IN 46220

ROTH,JAMES ROBT FP 326
WOLFLAKE IN 46796

ROTH,LEO ORS 174
8500 BROADWAY
MERRILLVILLE IN 46410

ROTHBAUM,DONALD ALAN IM 134
8402 HARCOURT ROAD #713
INDIANAPOLIS IN 46260

ROTHENBERG,JERRY PTH 296
600 MARY STREET
EVANSVILLE IN 47710

ROTHMAN,PETER MITCHELL PDA 082
2828 SOUTH FAIRFIELD AVE
FORT WAYNE IN 46807

ROTHROCK,PHILIP WAYNE IM 286
2200 SCOTT ST
LAFAYETTE IN 47904

ROTMAN,HARRY GENE US 102
111 E MAIN ST BOX 185
JASONVILLE IN 47438

ROTMAN,SAM ISSAC FP 102
P O BOX 127
JASONVILLE IN 47438

ROUDEBUSH,CORBIN P END 134
2020 W 86TH STREET
INDIANAPOLIS IN 46260

ROUEN,ROBT LESTER OPH 070
1209 HARRISON ST
P O BOX 981
ELKHART IN 46514

ROUGRAFF,MAURICE EMILE IM 134
ONE WEST 26TH STREET
INDIANAPOLIS IN 46206

ROUHANA,RODOLPH FP 134
1303 NORTH ARLINGTON AVE
INDIANAPOLIS IN 46219

ROURKE,ROBT F ORG 298
631 S 25TH ST
TERRE HAUTE IN 47803

ROUSHDI,HUSSEIN ALI GS 134
1213 ARLINGTON
INDIANAPOLIS IN 46219

ROUSSEAU,JOHN WM ORG 082
2410 COLISEUM BLVD N
FORT WAYNE IN 46805

ROW,GEO SAML FP 250
121 W RIPLEY
OSGOOD IN 47037

ROWE,GEO ANTHONY PDS 134
9002 MUD CREEK ROAD
INDIANAPOLIS IN 46256

ROYER,JAMES P FP 314
1020 N J STREET
RICHMOND IN 47374

ROYSTER,ROBT A GS 296
34 JOHNSON PLACE
EVANSVILLE IN 47714

RUBENS,ELI PDA 258
101 BEN FRANKLIN DR
SARASOTA FL 33577

RUBIN,SIMON SYRIL A 174
TWIN TOWERS S SUITE 527S
MERRILLVILLE IN 46410

RUBUSH,JOHN LANCE TS 258
919 EAST JEFFERSON BLVD
SOUTH BEND IN 46622

RUCKER,W RAYBURN IM 150
BOX 372
MADISON IN 47250

RUDDELL,KEITH RICHARD GS 134
1201 GOLDEN HILL DRIVE
INDIANAPOLIS IN 46208

RUDESILL,ROBT LOUIS IM 134
3266 N MERIDIAN ST
INDIANAPOLIS IN 46208

RUDICEL,MAX HURD FP 062
2423 W JACKSON ST
MUNCIE IN 47303

RUDICEL,MAX W PTH 126
1907 W SYCAMORE ST
KOKOMO IN 46901

RUDOLPH,KENNETH JACOB OPH 296
3700 BELLEMEADE
EVANSVILLE IN 47715

RUDOLPH,ROSSER A CLP 146
R R # 1
YORKTOWN IN 47396

RUDSER,DONALD HARRY FP 174
2075 INDIANAPOLIS BLVD
WHITING IN 46394

RUDWELL,GEO HENDERSON OTO 034
200 LONGVIEW DR
JEFFERSONVILLE IN 47130

RUDY,DONALD BYRON FP 318
PO MNENE VIO BELINGW
RHODESIA AFRICA

RUFF,JERARD GOEKE PD 214
413 WEST FIRST ST
BLOOMINGTON IN 47401

RUIZ,CARLOS MEDINA FP 306
123 S SECOND ST
BOONVILLE IN 47601

RULE,NED PERRY U 296
611 HARRIETT ST
EVANSVILLE IN 47710

RUMANA,ROBT HENRY IM 318
303 S MAIN ST
BLUFFTON IN 46714

RUNGE,PAUL WM IM 314
100 N 15TH ST
RICHMOND IN 47374

RUOFF,WM F IM 078
1349 GRABLE COURT
NEW ALBANY IN 47150

RUPE,LLOYD O GS 070
211 S 5TH ST
ELKHART IN 46514

RUSCHE,HENRY J FP 296
313 W IOWA ST
EVANSVILLE IN 47710

RUSCHE,HERMAN FREDERICK GE 296
3700 BELLMEADE AVE
EVANSVILLE IN 47715

RUSCHE,THOS JEROME N 296
611 HARRIET SUITE 304
EVANSVILLE IN 47710

RUSCHLI,EDWARD BARNARD FP 286
APT 402
300 VALLEY ST
LAFAYETTE IN 47905

RUSHER,MERRILL W GYN 082
3003 LAKE AVE.
FT. WAYNE IN 46805

RUSHMORE,CHAS HENRY OM 134
240 N MERIDIAN ST RM 354
INDIANAPOLIS IN 46204

RUSK,BARTON JAY PUD 134
8402 HARCOURT RD
509
INDIANAPOLIS IN 46260

RUSK,HUBERT MORGAN FP 086
BOX 36
WALLACE IN 47988

RUSSELL,DONALD E ORS 134
1815 N CAPITOL AVE
910 ORTHOPAEDIAS OF INDPLS
INDIANAPOLIS IN 46202

RUSSELL,JOHN ROBT NS 134
SUITE 408
1633 N CAPITOL AVE
INDIANAPOLIS IN 46202

RUSSO,ANDREW ESCHER FP 174
12110 GRANT ST
CROWN POINT IN 46307

RUST,BYRON KENNETH PD 134
8400 VAMO RD APT 1214
SARASOTA FL 33581

RUST,ROLAND B IM 134
5626 EAST 16TH ST SUITE 21
INDIANAPOLIS IN 46218

RUTHERFORD,CHAS E GS 286
2315 S ST
LAFAYETTE IN 47904

RYAN,C DAVID OBG 014
2012 DOCTORS PARK
COLUMBUS IN 47201

RYAN,GLEN V FP 134
3500 LAFAYETTE RD
INDIANAPOLIS IN 46222

RYAN,HUBERT JOS PD 174
826-9TH
NEW SMYRNA BEACH FL 32069

RYAN,WM JOHN GS 014
DOCTORS PARK
COLUMBUS IN 47201

RYDER,KENNETH WM PTH 134
7337 BROADVIEW DRIVE
INDIANAPOLIS IN 46627

RYU,CHI YOL DR 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

SAALWAECHTER,JOHN JACOB FP 022
404 WEST CAMP
LEBANON IN 46052

SAAVEDRA,BERNARDO NS 174
5490 BROADWAY PLAZA SUITE L-23
MERRILLVILLE IN 46410

SABENS,JAMES ALBERT FP 134
8375 PENDLETON PIKE APT 500
INDIANAPOLIS IN 46226

SABD,WILLIAM J — ORS — 174
800 MACARTHUR BLVD SUITE 8
MUNSTER IN 46321

SACRIS,MARIA ORCHID M — OBG — 230
802 LAPORTE AVENUE
VALPARAISO IN 46383

SADDAWI,DAVID N — PS — 178
1373 SQUIRE DRIVE APT F
SOUTH BEND IN 46637

SAFAYAN,ESFANDIAR — DTD — 298
221 S 6TH ST
TERRE HAUTE IN 47801

SAFIRSTEIN-ROSZERMAN,M — AN — 082
105 THREE RIVERS N
FORT WAYNE IN 46802

SAGALOWSKY,ARTHUR I — U — 134
3770 CROWN SHORE
DALLAS TX 75234

SAGALOWSKY,HOWARD SIDNEY — AN — 134
1815 N CAPITOL AVE
ROOM 301
INDIANAPOLIS IN 46202

SAGE,CHAS VICTOR — OS — 314
48 S 11TH ST
RICHMOND IN 47374

SAHLMANN,HANS — FP — 082
2402 WOODWARD
FORT WAYNE IN 46805

SAINE,BRIAN DAVID — OTD — 258
211 NORTH EDDY
SOUTH BEND IN 46617

SALA,JOS JOHN — FP — 174
5490 BROADWAY L-16
MERRILLVILLE IN 46410

SALA,WALTER RUDOLPH — FP — 174
5490 BROADWAY L-16
MERRILLVILLE IN 46410

SALAMA,FAWZY EL-SAYED — U — 296
10730 RIDGE KNOLL DRIVE
EVANSVILLE IN 47711

SALAS,C DAVID — OPH — 122
1528 WASHINGTON ST
NEW CASTLE IN 47362

SALAZAR,LUIS BARBA — GE — 258
3120 RUE RENOIR APT 205
SOUTH BEND IN 46615

SALB,JOHN PAUL — FP — 066
MEDICAL ARTS BLDG
JASPER IN 47546

SALBERG,LARRY MICHAEL — N — 230
802 LA PORTE AVENUE
VALPARAISO IN 46383

SALEH,IBRAHIM MITRE — OBG — 174
6111 HARRISON ST
MERRILLVILLE IN 46410

SALES,AVELIND T — AN — 134
12103 WINDSOR DR
CARMEL IN 46032

SALISBURY,CHAS PARSON — OBG — 298
SUITE 205
1024 S 6TH
TERRE HAUTE IN 47807

SALOMON,JAIME A — GPM — 134
8739 SAWLEAF
INDIANAPOLIS IN 46260

SALON,HARRY W — FP — 082
535 W BERRY ST
FORT WAYNE IN 46802

SALON,JOEL WARREN — IM — 082
604 W WAYNE ST
FORT WAYNE IN 46802

SALSBURG,HERBERT E — P — 178
R R 1 BOX 355
HAMLET IN 46532

SALVO,ATEE SEVILLA — AN — 086
403 NORTH MONROE
WILLIAMSPORT IN 47993

SAMADDAR,PRASOON KUMAR — OTO — 182
1706 24TH STREET
BEDFORD IN 47421

SAMALIO,JUSTO R — AN — 178
6484 W BLECK ROAD
LA PORTE IN 46350

SAMI,ABDEL W — PTH — 182
2900 WEST 16TH ST
BEDFORD IN 47421

SANCHEZ,JOSE DOLORES — AN — 178
P O BOX 211
LA PORTE IN 46350

SANDERS,BERTRAM WEBB — FP — 074
634 EASTERN AVE
CONNERSVILLE IN 47331

SANDERS,FRED — FP — 134
2702 WESTLANE RD
INDIANAPOLIS IN 46268

SANDERS,HARRY MUNFORD — FP — 134
COMMUNITY HOSPITAL
INDIANAPOLIS IN 46219

SANDERSON,ROBT BURNS — PUD — 258
238 S HAWTHORNE
SOUTH BEND IN 46617

SANDLIN,DONALD LEE — FP — 014
2127 DOCTORS PARK DR
COLUMBUS IN 47201

SANDOCK,LOUIS F — IM — 258
503 SHERLAND BLDG
SOUTH BEND IN 46601

SANDOCK,MARK STEVEN — IM — 258
818 SHERLAND BLDG
SOUTH BEND IN 46601

SANDOZ,HARRY H — FP — 258
2500 TOPSFIELD RD
SOUTH BEND IN 46614

SANGALANG,ZENAIDA S — EM — 182
1714 24TH ST
BEDFORD IN 47421

SANKEY,PEGGY LOU — PTH — 298
4951 DIXIE BEE 16 A
TERRE HAUTE IN 47802

SANTARE,VINCENT JOS — U — 174
513 RIDGE RD
MUNSTER IN 46321

SANTOS,FRANCISCO — AN — 134
3801 N MERIDIAN ST APT 1202
INDIANAPOLIS IN 46208

SAPERSTEIN,MORRIS — CHP — 106
110 LAKEVIEW DRIVE
NOBLESVILLE IN 46060

SARKAR,ANIL K — 282
320 N SECTION ST
SULLIVAN IN 47882

SARKAR,DIPA — 038
1206 EAST NATIONAL AVE
BRAZIL IN 47834

SARNAT,WM STEWART — CD — 258
211 NORTH EDDY ST
SOUTH BEND IN 46617

SARTORE,GILBERT ALLAN — FP — 296
801 ST MARYS DR SUITE 200
EVANSVILLE IN 47715

SATO,TAKUYA — CHP — 134
4370 COOPER RD
INDIANAPOLIS IN 46208

SAUCELO,BARTOLOME M — FP — 258
1415 LINCOLN WAY WEST
SOUTH BEND IN 46628

SAUER,JOHN BERNARD — FP — 134
3655 S SHERMAN DR
BEECH GROVE IN 46107

SAUL,GEORGE M — IM — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

SAWYER,DOUGLAS EARL — FP — 166
2235 DU BOIS DRIVE
WARSAW IN 46580

SAYLORS,RODGER DALE — FP — 178
41 PARK ROW
MICHIGAN CITY IN 46360

SCALES,ALLEN DEARING — FP — 066
LELAND HEIGHTS
HUNTINGBURG IN 47542

SCAMAHORN,JAMES OSCAR — FP — 118
34 WEST MAIN STREET
PITTSBORO IN 46167

SCAMAHORN,MALCOLM O — FP — 118
MAIN AT MEREDIAN
PITTSBORO IN 46167

SCANLON,JOHN CHAS — PUD — 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

SCEA,WALLACE A — FP — 186
1600 S ANDERSON ST
ELWOOD IN 46036

SCHAAB,ERIC — PD — 082
131 E TILLMAN RD
FORT WAYNE IN 46816

SCHAAF,ALVIN DAVID — FP — 022
33 S WALNUT ST
JAMESTOWN IN 46147

SCHAAF,BERNARD J — U — 286
321 NORTH 22ND ST
LAFAYETTE IN 47904

SCHAEFER,G L — OBG — 158
176 EAST JEFFERSON
FRANKLIN IN 46131

SCHAFER,WM CHAS — OPH — 046
1312 BEDFORD RD
WASHINGTON IN 47501

SCHAFFER,EDWARD V — ORS — 134
5626 E 16TH STREET # 13
INDIANAPOLIS IN 46218

SCHAFFER,JAMES JOHANNES — PD — 214
717 W 1ST ST
BLOOMINGTON IN 47401

SCHALLIOL,JAMES PAUL — P — 090
ROOM 107 KNAPP BLDG
ROCHESTER IN 46975

SCHANTZ,RICHARD — FP — 142
418 SOUTH KENTUCKY
REMINGTON IN 47977

SCHAPHORST,RICHARD A — FP — 258
612 N MAIN ST
MISHAWAKA IN 46544

SCHAROFF,JAY ROBT — NM — 174
600 GRANT ST
GARY IN 46402

SCHAUWECKER,CLEON M — GS — 242
239 HILLSDALE AVE
GREENCASTLE IN 46135

SCHECHTER,JOHN S — IM — 134
3266 N MERIDIAN ST
INDIANAPOLIS IN 46208

SCHECHTER,JOHN STEPHEN — PD — 214
413 W FIRST AVE
BLOOMINGTON IN 47401

SCHEER,ALEXANDER L — OTO — 070
P O BOX 201
ELKHART CLINIC
ELKHART IN 46514

SCHEERES,JACOB WM — GS — 286
2315 SOUTH ST
LAFAYETTE IN 47905

SCHEERINGA,RONALD HENRY — IM — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

SCHEIDLER,JAMES A — IM — 134
3421 BRECKERIDGE DR
INDIANAPOLIS IN 46208

SCHEIER,EMIL WM — OS — 134
9220 VANDERGRIFF RD
INDIANAPOLIS IN 46239

SCHEIMANN,LOIS A GRIEDER — A — 230
702 LINCOLNWAY
VALPARAISO IN 46383

SCHELL,HARRY RICHARD — OBG — 214
711 W 2ND ST
BLOOMINGTON IN 47401

SCHEMMER,KENNETH EDWIN — GS — 186
1931 BROWN ST SUITE 7
ANDERSON IN 46014

SCHEN,SANFORD ELLIOTT — IM — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

SCHENCK,RALPH E — ORS — 146
603 W ARCH ST
P O BOX 1286
PORTLAND IN 47371

SCHERB,BURTON E — OPH — 298
1024 S 6TH ST
TERRE HAUTE IN 47807

SCHERER,JACK ROGER — D — 014
360-C PLAZA DRIVE
TIPTON PARK PLAZA
COLUMBUS IN 47201

SCHERSCHEL,THOS ROGER — GS — 126
3423-B S LAFOUNTAIN
KOKOMO IN 46901

SCHEURICH,MANLEY KING — FP — 018
BOX 85
OXFORD IN 47971

SCHILLER,HERBERT A — OBG — 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

SCHILLING,RICHARD J — GS — 214
711 W 2ND ST
BLOOMINGTON IN 47401

SCHIMMELPFENNIG,ROBT WM — PD — 296
1013 PARRETT ST
EVANSVILLE IN 47713

SCHIRMER,ROBT H — FP — 296
4300 KASSON
EVANSVILLE IN 47712

SCHLADEMAN,KARL R — PTH — 082
P O BOX 268
FORT WAYNE IN 46801

SCHLAEGEL,THEODORE F — OPH — 134
1100 W MICHIGAN ST
DEPT OF OPHTHALMOLOGY
INDIANAPOLIS IN 46223

SCHLEGEL,DONALD M — GS — 134
1815 N CAPITOL AVE
INDIANAPOLIS IN 46202

SCHLEINKOFER,ROBT MELVIN — FP — 082
3217 LAKE ST
FORT WAYNE IN 46805

SCHLESINGER,DANL J — GS — 174
6633 FOREST
HAMMOND IN 46324

SCHLOSS,ROBT PHILIP — FP — 082
5717 S ANTHONY BLVD
FORT WAYNE IN 46806

SCHLOSSBERG,VICTOR E — IM — 258
301 W 4TH ST
MISHAWAKA IN 46544

SCHLUETER,DAVID PAUL — U — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

SCHMALHAUSEN,ANSEL WAYNE — GS — 134
1500 ALBANY ST SUITE 806
BEECH GROVE IN 46107

SCHMALZ,WM JUSTIN — IM — 214
822 W FIRST
BLOOMINGTON IN 47401

SCHMETZER,ALAN DAVID — P — 134
MID-TOWN MENTAL HEALTH CTR
1100 W MICHIGAN ST
INDIANAPOLIS IN 46223

SCHMIDT,EUGENE EDWARD — AN — 082
1119 MAXINE DRIVE
FORT WAYNE IN 46807

SCHMIDT,PAUL EDGAR — CO — 134
3266 N MERIDIAN ST NO 701
INDIANAPOLIS IN 46208

SCHMIEDICKE,PAUL HENRY — IM — 286
112 WHEELER LANE
WEST LAFAYETTE IN 47906

SCHMITT,RICHARD K — FP — 014
2639 RIVERSIDE DR
COLUMBUS IN 47201

SCHMITT,ROBT J — P — 174
9337 CALUMET AVE
SUITE A
MUNSTER IN 46321

SCHMOLL,ROBT J — OPH — 082
521 W WAYNE ST
FORT WAYNE IN 46802

SCHNEIDER,CHAS P — FP — 296
2912 W MARYLAND ST
EVANSVILLE IN 47712

SCHNEIDER,KENNETH DALE — AN — 014
2760 25TH ST
COLUMBUS IN 47201

SCHNEIDER,LAWRENCE F — FP — 014
2760 25TH ST
COLUMBUS IN 47201

SCHNEIDER,LOUIS A — PTH — 082
700 BROADWAY
FORT WAYNE IN 46802

SCHNEIDER,PAUL A — ORS — 134
5626 E 16TH ST
INDIANAPOLIS IN 46218

SCHNELL,FREDERICK — 050
605 WILSON CREEK RD
LAWRENCEBURG IN 47025

SCHNUTE,RICHARD B — END — 134
1100 W MICHIGAN ST
EMERSON 421
INDIANAPOLIS IN 46223

SCHOEN,FREDERIC L — FP — 134
1100 WEST MICHIGAN ST
DEPT FAMILY MED LONG 217
INDIANAPOLIS IN 46202

SCHOENHALS,CHAS ERB — GS — 082
1320 MEDICAL PARK DR
FORT WAYNE IN 46825

SCHOOLFIELD,WM EARL — FP — 210
260 S MAPLE ST
ORLEANS IN 47452

SCHOONVELD,ARTHUR — FP — 204
420 EAST MAIN ST
BROOK IN 47922

SCHREINER,JOHN EDWARD — FP — 190
201 E PLYMOUTH
BREMEN IN 46506

SCHREPFERMAN,WAYNE — FP — 278
P O BOX 38
HAMILTON IN 46742

SCHRIEFER,VICTOR V — FP — 296
2845 RAVENSWOOD
EVANSVILLE IN 47714

SCHROEDER,HENRY R — OBG — 296
SUITE 330
350 W COLUMBIA
EVANSVILLE IN 47710

SCHROEDER,JAMES EDWIN — HEM — 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

SCHROEDER,STEPHEN BLAIN — NS — 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

SCHUBERT,ESTHER — 186
H C M H
NEW CASTLE IN 47362

SCHUBERT,JEROME C — FP — 082
5110 N CLINTON
FORT WAYNE IN 46825

SCHUBERT,PHILIP CHANDLER — FP — 082
6203 PLANTATION LANE
FORT WAYNE IN 46815

SCHUCK,JOHN BENET — US — 140
311 HENRY ST
DOCTORS PARK
NORTH VERNON IN 47265

SCHULER,GRAHAM T — FP — 296
421 CHESTNUT STREET
EVANSVILLE IN 47713

SCHULHOF,MAURICE G — GS — 062
420 W WASHINGTON ST
MUNCIE IN 47305

SCHULTHEIS,RICHARD LEE — GPM — 134
1919 EAST 52ND ST
SUITE 302
INDIANAPOLIS IN 46205

SCHULZ,KURT J E — OPH — 174
1615 YOUNG
MUSCATINE IA 52761

SCHUMACHER,RICHARD R — CD — 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

SCHUMAKER,ROBT A — FP — 298
3498 E MARGARET AVE
TERRE HAUTE IN 47802

SCHUSTER,DWIGHT WM — P — 134
1815 NORTH CAPITOL AVE
INDIANAPOLIS IN 46202

SCHWARTZ,JACK — OBG — 174
7550 HOHMAN AVE
MUNSTER IN 46321

SCHWARTZ,MAGDA — AN — 174
7315 FOREST AVE
HAMMOND IN 46324

SCHWARTZBERG,STUART G — CDS — 082
2414 E STATE BLVD
FORT WAYNE IN 46805

SCHWARZ,ANTON JOS — IM — 134
1 EUCLID AVE NO A4
SUMMIT NJ 07901

SCOFIELD,JOHN B — P — 134
3120 MERIDIAN ST
INDIANAPOLIS IN 46208

SCOTT,FRANK M — GS — 258
211 N EDDY AT COLFAX
SOUTH BEND IN 46617

SCOTT,GEO EVERETT AN 134
4110 ROLAND RD
INDIANAPOLIS IN 46208

SCOTT,H VAUGHN PD 082
801 E STATE ST
FORT WAYNE IN 46805

SCOTT,IRVIN HUDSON GS 282
117 W WASHINGTON ST
SULLIVAN IN 47882

SCOTT,IVAN WINFIELD PD 134
6106 RIVERVIEW DRIVE
INDIANAPOLIS IN 46208

SCOTT,JOHN RICHARD PD 134
6214 BROADWAY
INDIANAPOLIS IN 46220

SCOTT,JOHN SPAHR R 178
806 MAPLE AVE
LA PORTE IN 46350

SCOTT,PETER L DR 126
HOWARD COMMUNITY HOSPITAL
RADIOLOGY DEPT
KOKOMO IN 46901

SCOTT,SAML LOGAN GS 134
7099 BROADWAY
INDIANAPOLIS IN 46220

SCOTT,V BROWN IM 266
R R 2 BOX 11
SHELBYVILLE IN 46176

SCOTT,WM MOUNT FP 262
P O BOX 4399
SCOTTSBURG IN 47170

SCUDDER,ARTHUR NELSON FP 118
24 N GRANT ST
BROWNSBURG IN 46112

SCUDDER,GARY EVANS FP 050
370 BIELBY RD
LAWRENCEBURG IN 47025

SCUDDER,JAMES PETERSON U 082
3124 E STATE ST
FORT WAYNE IN 46805

SCULLY,JOHN T IM 174
6111 HARRISON AVE
MERRILLVILLE IN 46410

SCULLY,WM EDWARD PD 298
221 S 6TH ST
TERRE HAUTE IN 47801

SCUPHAM,WM KENT IM 178
900 I ST
LA PORTE IN 46350

SCUZZO,VINCENT C CRS 258
214 SPERLAND BLDG
SOUTH BEND IN 46601

SEAGLE,WM COURTNEY ORS 214
111 E 9TH ST
BLOOMINGTON IN 47401

SEAL,PERRY FRANCIS FP 074
901 N MAIN ST
BROOKVILLE IN 47012

SEAMAN,CHAS FRANCIS EM 134
820 GREEN MEADOW LANE
PORT RICHEY FL 33568

SEARCY,LINDA MARIE OS 286
7503 NORTH 50 W
LAFAYETTE IN 47906

SEARIGHT,HOWARD R OTO 062
3111 WEST JACKSON
MUNCIE IN 47304

SEARIGHT,JOHN LEWIS FP 134
1303 N ARLINGTON
INDIANAPOLIS IN 46219

SEARS,DON ALVIN FP 046
508 W ELNORA
ODON IN 47562

SEAT,MARSHALL H FP 046
1400 GRAND AVE
WASHINGTON IN 47501

SEBAHAR,DUANE ALLEN IM 014
SUITE 1B
3200 SYCAMORE CT
COLUMBUS IN 47201

SEBASTIAN,RICARDO F EM 174
9530 LINCOLN COURT
CROWN POINT IN 46307

SEDAM,HERBERT L FP 134
740 EAST 52ND SUITE 4
INDIANAPOLIS IN 46205

SEESE,ROBT M FP 026
101 W NORTH ST
DELPHI IN 46923

SEIBEL,ROBT MARVIN FP 014
BOX 127
NASHVILLE IN 47448

SEIPEL,STANLEY F FP 078
P O BOX 98
LANESVILLE IN 47136

SEKULICH,MILO M R 126
ST JOSEPH HOSP
KOKOMO IN 46901

SELLERS,FRANCIS M FP 258
814 OAK RIDGE DR
SOUTH BEND IN 46617

SELLMER,GEO WM FP 134
8760 DRIFTWOOD DR
INDIANAPOLIS IN 46240

SEMERDJIAN,ARAM R 174
8319 LINDEN AVE
MUNSTER IN 46321

SENN,RICHARD THOS U 126
1716 SOUTH PLATE
KOKOMO IN 46901

SENSENY,EUGENE F CRS 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

SENTANY,MARKI S PS 134
3530 S KEYSTONE
INDIANAPOLIS IN 46227

SER VAAS,CORENA SYNHORST OS 134
1100 WATERWAY BLVD
INDIANAPOLIS IN 46202

SERA,SEGUNDO R PD 182
2900 W 16TH ST
BEDFORD IN 47421

SERNA,CARLOS A IM 174
1417 MAC ARTHUR BLVD
MUNSTER IN 46321

SERRANO,EDWARD EM 134
622 NORTH MADISON ST
GREENWOOD IN 46142

SERRANO,JOSE FLORENTINO ABS 174
1533 HEATHER COURT
MUNSTER IN 46321

SERVIES,HERSCHELL R 110
1122 N LEBANON ST
LEBANON IN 46052

SEXSON,HIRAM TETRICK FP 134
3201 N MERIDIAN ST
INDIANAPOLIS IN 46208

SFREDDO,LOUIS C 070
2200 CALIFORNIA RD
ELKHART IN 46514

SHAFER,MARION RUSSELL IM 134
115 NORTH PENN ST
INDIANAPOLIS IN 46204

SHAFER,RICHARD H FP 186
111 S HARRISON ST
ALEXANDRIA IN 46001

SHAFFER,WM R AN 054
214 N FRANKLIN ST
GREENSBURG IN 47240

SHAH,AJIT OBG 098
702 RIVER DR
MARION IN 46952

SHAH,KISHORI P OBG 130
1060 ETNA AVE
HUNTINGTON IN 46750

SHAH,NALIN M AN 134
736 RAMBLIN RD
GREENWOOD IN 46142

SHAH,PIYUSH J PD 130
1060 ETNA AVE
HUNTINGTON IN 46750

SHAH,PRIYA IM 082
1600 EAST PAULDING ROAD EAST
FORT WAYNE IN 46816

SHAH,RAMESHCHANDRA L IM 174
110 RIDGE RD
MUNSTER IN 46321

SHAHBAHRAMI,FARROKH GS 214
822 WEST 1ST STREET
BLOOMINGTON IN 47401

SHALLENBERGER,HENRY R FP 246
MODOC IN 47358

SHANAFELT,DONALD K OBG 134
5471 E 77TH ST
INDIANAPOLIS IN 46250

SHANKLIN,JACK LESLIE FP 162
702 VIGO ST
VINCENNES IN 47591

SHANKLIN,VERNON A FP 298
15 CIRCLE DR
TERRE HAUTE IN 47803

SHANKS,RAY W FP 106
1148 LUCERNE PKWY
CAPE CORAL FL 33904

SHANNON,WESLEY EUGENE FP 198
215 N WARD ST
CRAWFORDSVILLE IN 47933

SHAPIRO,BURTON J OPH 134
9530 HOLLIDAY DRIVE
INDIANAPOLIS IN 46260

SHAPIRO,SEYMOUR WM GS 174
6400 152 CT
LOWELL IN 46356

SHARP,GARY CHAS FP 110
1471 JASON RD
GREENFIELD IN 46140

SHARP,MERLE CALVIN OBG 258
912 E LA SALLE AVE
SOUTH BEND IN 46617

SHARP,THOS WAYNE FP 214
2920 RAMBLE RD WEST
BLOOMINGTON IN 47401

SHARP,WM LELAND P 186
559 CITIZENS BANK BLDG
ANDERSON IN 46016

SHARVELLE,D J OPH 286
2424 GLICK ST
LAFAYETTE IN 47905

SHATTUCK,JOHN CHAS FP 038
11 WEST CHESTNUT ST
BRAZIL IN 47834

SHAW,GLENN ROBT OBG 318
1344 KENWOOD DR
BLUFFTON IN 46714

SHEALY,THOS ALLEN OPH 082
3030 LAKE AVE
SUITE 5
FORT WAYNE IN 46805

SHEEHAN,E GREGG — OBG — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

SHEEHAN,FRANCIS G — EM — 134
8436 BROWNING ORIVE NO 0
INDIANAPOLIS IN 46227

SHEEHY,JOSEPH C — IM — 014
380 PLAZA DRIVE SUITE 0
COLUMBUS IN 47201

SHEEK,KENNETH IVINSON — FP — 158
360 S MADISON AVE
GREENWOOD IN 46142

SHEELER,GARY LEE — FP — 082
BOX 626
DE KALB MED ARTS CTR
AUBURN IN 46706

SHEETS,CHAS E — FP — 254
BOX 176
MANILLA IN 46150

SHELOON,SUEL A — D — 186
508 ANDERSON BANK BLDG
ANDERSON IN 46016

SHELLENBERGER,WALLACE A — P — 210
RT 3
PAOLI IN 47454

SHELLER,TOM GEO — P — 030
3131 GEORGE ST
LOGANSPORT IN 46947

SHELLEY,EDWARD S — FP — 258
207 S TAYLOR ST
SOUTH BEND IN 46625

SHELLEY,RICHARD JOS — OBG — 134
5470 E 16TH ST
INDIANAPOLIS IN 46218

SHELTON,CLYDE F — PO — 078
1726 STATE ST
NEW ALBANY IN 47150

SHELTON,N PHILIP — FP — 162
621 S 7TH ST
VINCENNES IN 47591

SHEPARD,WILLIAM D — 098
707 RIVER DRIVE
MARION IN 46952

SHERER,KENNETH E — AN — 314
1400 CHESTER BLVD
RICHMOND IN 47374

SHERMAN,DAVID EMERY — OBG — 286
2400 FERRY ST
LAFAYETTE IN 47904

SHERRITT,WALLACE W — OBG — 230
1101 EAST GLENDALE
VALPARAISO IN 46383

SHERSTER,HARRY — FP — 134
8407 OAK PARK ORIVE
INDIANAPOLIS IN 46227

SHETTY,DAYANANDA M — OTO — 174
800 MAC ARTHUR BLVD
MUNSTER IN 46321

SHEVICK,ALEXANDER — OBG — 230
840 LINCOLNWAY
VALPARAISO IN 46383

SHIELDS,DUNCAN MC ELROY — OM — 230
106 WEST CHESTER CT
CHESTERTON IN 46304

SHIELDS,JACK EMERSON — FP — 138
603 W SPRING ST
BROWNSTOWN IN 47220

SHINA,HASSI — FP — 034
CHARLESTOWN LANDING RD
CHARLESTOWN IN 47111

SHINABERY,LAWERENCE — FP — 082
212 THREE RIVERS NORTH
FORT WAYNE IN 46802

SHINN,GLORIA LOU — GS — 318
303 S MAIN ST
BLUFFTON IN 46714

SHIPLEY,EDWARD CHAS — P — 134
2010 W 86TH ST SUITE 205
INDIANAPOLIS IN 46260

SHIRAZI KESHAVARZ,E — OTO — 314
2000 WEST MAIN ST NO E
RICHMOND IN 47374

SHIVELY,JOHN L — ORS — 286
2525 SOUTH ST
LAFAYETTE IN 47904

SHOEMAKER,RICHARD L — FP — 098
3547 SOUTH 100 EAST
LAFAYETTE IN 47905

SHOEMAKER,RUSSELL — US — 204
10055 COUNTY LINE RO
DEMOTTE IN 46310

SHOLTY,WM MAXWELL — AN — 286
1831 LILLY ROAD
LAFAYETTE IN 47905

SHORT,JOHN A — AN — 314
4284 SOUTH C COURT
RICHMOND IN 47374

SHOWALTER,JOHN RALPH — FP — 298
1233 MAPLE AVE
TERRE HAUTE IN 47804

SHRIBER,WM HOWARD — OBG — 258
211 N EDDY AT COLFAX
SOUTH BEND IN 46617

SHRINER,PHILIP OWEN — U — 082
3124 EAST STATE BLVD NO 19-21
FORT WAYNE IN 46805

SHRINER,RICHARD LEE — P — 258
914 E JEFFERSON BLVD
SOUTH BEND IN 46617

SHRINER,WILLIAM CUPPY — P — 298
620 8TH AVE
TERRE HAUTE IN 47804

SHROCK,ETHAN ELLSWORTH — FP — 098
AMBOY IN 46911

SHROYER,HERBERT L — FP — 146
1137 SOUTH MAIN ST
DUNKIRK IN 47336

SHUCK,WILLIAM ARTHUR — GS — 098
1251 KEM RD
MARION IN 46952

SHUCK,WM ARTHUR — GS — 150
414 N MULBERRY ST
MADISON IN 47250

SHUGART,ROBERT R — ORS — 082
2609 FAIRFIELD AVE
FORT WAYNE IN 46807

SHULL,DANL LYNN — FP — 134
100 NORTH 9TH STREET
ZIONSVILLE IN 46077

SHULRUFF,HARRY I — OPH — 174
3701 MAIN ST
EAST CHICAGO IN 46312

SHULTZ,CLIFFORD JAMES — FP — 058
6813 COVINGTON CREEK TRAIL
FORT WAYNE IN 46804

SHUMACKER,HARRIS B — CDS — 134
8402 HARCOURT RD STE 411
INDIANAPOLIS IN 46260

SIBBITT,JOS WM — OTO — 214
115 S LINCOLN
BLOOMINGTON IN 47401

SIDDIQUI,ASLAM R — NM — 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

SIDEBOTTOM,EARL W — GS — 134
4000 E SOUTHPORT RD
INDIANAPOLIS IN 46227

SIDEL,ALAN WAYNE — FP — 082
5110 N CLINTON
FORT WAYNE IN 46825

SIDELL,JAMES PAUL — FP — 082
1208 LINCOLN HWY E
NEW HAVEN IN 46774

SIDERYS,HARRY — TS — 134
1815 N CAPITAL AVE-507
INDIANAPOLIS IN 46202

SIEBENMORGEN,PAUL — FP — 298
1024 S 6TH ST
TERRE HAUTE IN 47807

SIEGEL,LYLE PHILLIP — AN — 296
7091 E CHERRY ST
EVANSVILLE IN 47715

SIEKIERSKI,JOS M — FP — 174
145 N GRIFFITH BLVD
GRIFFITH IN 46319

SIGDA,FREDERICK — IM — 296
804 ST MARY'S DRIVE
EVANSVILLE IN 47715

SIGMOND,HARVEY W — ORS — 134
8220 NAAB ROAD # 203
INDIANAPOLIS IN 46260

SIGMUND,WM BELMER — U — 014
PO BOX 366
COLUMBUS IN 47201

SILBERT,DAVID B — FP — 266
17 S TOMPKINS ST
SHELBYVILLE IN 46176

SILBERT,MICHAEL ZALMAN — GS — 214
822 W IST ST SUITE 4
BLOOMINGTON IN 47401

SILBERT,ROBT KIM — PM — 134
1633 NORTH CAPITOL AVE
INDIANAPOLIS IN 46202

SILVA,CARLOS A — GS — 134
4949 CARSON AVENUE
INDIANAPOLIS IN 46227

SILVA,GUY D — ORG — 078
SUITE 422
1919 STATE ST
NEW ALBANY IN 47150

SILVER,RICHARD ARNOLD — R — 134
1114 FREDRICK DR SOUTH
INDIANAPOLIS IN 46260

SILVERO,HUBERT L — FP — 082
1417 N ANTHONY BLVD
FORT WAYNE IN 46805

SILVERS,L MICHAEL — FP — 302
1104 N WAYNE
NORTH MANCHESTER IN 46962

SIMMLER,DONALD W — IM — 062
2401 UNIVERSITY AVE
BALL MEMORIAL HOSP
MUNCIE IN 47303

SIMMONS,FREDERICK H — OTO — 098
1009 N BALDWIN AVE
MARION IN 46952

SIMMONS,JAMES EDWIN — CHP — 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

SIMMS,J LEON — FP — 134
3140 N ILLINOIS ST
INDIANAPOLIS IN 46208

SIMS,J LAWRENCE — OTO — 134
1311 N ATLANTIC AVE
NEW SMYRNA BEACH FL 32069

SIMS,LARRY WAYNE — EM — 296
521 KIRKWOOD DR
EVANSVILLE IN 47715

SINCHAI,PRAVIT — OPH — 174
PO BOX 140
CROWN POINT IN 46307

SINGCO,BIENVENIDO O — FP — 110
10 WEST BOYD AVE
GREENFIELD IN 46140

SINGER,MARK I — OTO — 134
1100 W MICHIGAN AVE
RILEY A 56
INDIANAPOLIS IN 46202

SINGH,CHANDRABHAN — PTH — 158
JOHNSON CO HOSP PATH DEPT
P O BOX 368
FRANKLIN IN 46131

SINGH,URMILA — PD — 134
6919 G 10TH ST SUITE E 2
INDIANAPOLIS IN 46219

SINKOVIC,GERALD MATHIAS — FP — 134
25 BEACHWAY DR
INDIANAPOLIS IN 46224

SINN,CHAS M — IM — 296
29 JOHNSON PLACE
EVANSVILLE IN 47714

SIRLIN,EDWARD MARTIN — PD — 082
CANTERBURY GREEN
5248-6 STONEHEDGE BLVD
FORT WAYNE IN 46815

SIRUGO,ALDO CORRADO — OTO — 178
6916 W JOHNSON RD
LA PORTE IN 46350

SISON,EDUARDO VENTENILLA — FP — 230
2105 OLD OAK DR
VALPARAISO IN 46383

SISON,ROSE DORADO — PD — 298
2929 SOUTH 1ST ST
TERRE HAUTE IN 47802

SISON,VICENTE G — US — 298
2929 S 1ST ST
TERRE HAUTE IN 47802

SIXBEY,MAURICE DEAN — FP — 194
DENVER MED CLINIC
DENVER IN 46926

SKAFISH,PETER R — 178
900 I ST
LA PORTE IN 46350

SKAGGS,HOMER — EM — 296
RR NO 5 FLEENER
EVANSVILLE IN 47711

SKIDMORE,CHAS EDWARD — FP — 286
128 WEST MARKET ST
WOLCOTT IN 47995

SKILES,MELVIN JAMES — DR — 150
1312 MICHIGAN ROAD
MADISON IN 47250

SKILLERN,SCOTT D — D — 258
722 E COLIFAX
SOUTH BEND IN 46617

SKLENARZ,KRYSTYNA MARIA — P — 174
6111 HARRISON ST
MERRILLVILLE IN 46410

SLAMA,GEO FRANCIS — GE — 174
6111 HARRISON ST
MERRILLVILLE IN 46410

SLAMA,THOS GEO — ID — 134
3130 NORTH MERIDIAN STREET
INDIANAPOLIS IN 46208

SLAUGHTER,HOWARD C — OPH — 296
1001 WALNUT ST
EVANSVILLE IN 47708

SLAUGHTER,JOHN C — D — 296
MED ARTS BLDG SUITE 105
EVANSVILLE IN 47715

SLICHENMYER,JACK ELLIS — OTO — 134
3500 LAFAYETTE RD
INDIANAPOLIS IN 46222

SLICK,CRYSTAL RAY — FP — 246
457 ELM STREET
WINCHESTER IN 47394

SLOAN,W KEITH — GS — 150
426 E MAIN ST
MADISON IN 47250

SLUSS,DAVID H — GS — 134
3657 WASHINGTON BLVD
INDIANAPOLIS IN 46205

SMALL,GEO ROBT — FP — 158
P O BOX 522
GREENWOOD IN 46142

SMALL,IVER FRANCIS — P — 134
L D CARTER MEM HOSP
INDIANAPOLIS IN 46202

SMALL,THOS JAMES — IM — 158
JOHNSON CO MEMORIAL HOSP
P O BOX 368
FRANKLIN IN 46131

SMALLS,GEO DOUGLAS — U — 174
636 EAST 21ST AVE
GARY IN 46407

SMEJKAL,JERALD J — PS — 174
6111 HARRISON ST
MERRILLVILLE IN 46410

SMITH,A WILSON — IM — 242
1901 TAYLOR RD
COLUMBUS IN 47201

SMITH,BARTON TAYLOR — OBG — 098
702 RIVER RD
MARION IN 46952

SMITH,BERNARD — IM — 174
10456 S LONGWOOD DR
CHICAGO IL 60643

SMITH,BYRON DELFORD PTH 182
1600 23RD ST
DUNN HOSPITAL
BEDFORD IN 47421

SMITH,CHAS FELPS R 126
HOWARD COMMUNITY HOSP
KOKOMO IN 46901

SMITH,CLIFFORD CURTIS FP 082
5110 N CLINTON
FORT WAYNE IN 46825

SMITH,DAVID ELY PTH 134
2118 WHITEWOOD CT
INDIANAPOLIS IN 46260

SMITH,DAVID LESLIE OBG 134
5300 W 96TH ST
INDIANAPOLIS IN 46268

SMITH,DONALD WAYNE D 258
211 NORTH EDDY
SOUTH BEND IN 46617

SMITH,EVRETT FRANK E R 098
WABASH AND EUCLID STREETS
MARION GENERAL HOSP RAD DEPT
MARION IN 46952

SMITH,FRED GS 222
PROFESSIONAL BLDG
TELL CITY IN 47586

SMITH,GORDON LANE P 296
715 1ST AVE
EVANSVILLE IN 47710

SMITH,H CHAS PD 318
303 S MAIN ST
BLUFFTON IN 46714

SMITH,HAROLD EARL EM 296
4288 MEADOWBROOK LANE
NEWBURGH IN 47630

SMITH,HERSCHEL S OPH 214
P O BOX 667
316 EAST 4TH ST
BLOOMINGTON IN 47401

SMITH,HOPE C FP 134
3566 W 71ST
INDIANAPOLIS IN 46268

SMITH,JAMES WARREN CLP 134
N 440 UNIVERSITY HOSP
IND UNIV MED CTR
INDIANAPOLIS IN 46223

SMITH,JERALD E FP 174
7905 CALUMET AVE
MUNSTER IN 46321

SMITH,JERROLD REX PD 134
5430 E 21ST ST
INDIANAPOLIS IN 46218

SMITH,JOHN ARTHUR R 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46208

SMITH,JOHN HAROLD AN 110
144 GRANDISON RD
GREENFIELD IN 46140

SMITH,JOHN PAUL FP 082
3217 LAKE AVENUE
FORT WAYNE IN 46805

SMITH,KENNETH ALLEN IM 130
1804 N JEFFERSON ST
HUNTINGTON IN 46750

SMITH,LE ROY A ORS 178
311 RIPLEY ST
MICHIGAN CITY IN 46360

SMITH,LEE OPH 258
1925 E JEFFERSON BLVD
SOUTH BEND IN 46617

SMITH,LOWELL CLINE FP 286
615 LINGLE AVE
LAFAYETTE IN 47901

SMITH,PHILIP LE ROY OBG 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

SMITH,RALPH OGILVY IM 162
P O BOX 686
VINCENNES IN 47591

SMITH,RAY C GS 134
1303 N ARLINGTON AVE NO 4
INDIANAPOLIS IN 46219

SMITH,ROBT D FP 286
100 DONCASTER DR
LAFAYETTE IN 47905

SMITH,ROGER CARLTON IM 082
3124 E STATE ST
FORT WAYNE IN 46805

SMITH,ROY LEE U 134
407 N PENNSYLVANIA
INDIANAPOLIS IN 46204

SMITH,ROY MITCHEL FP 296
1307 STRINGTOWN RD
EVANSVILLE IN 47711

SMITH,STEWART P NEP 296
SUITE 501
801 ST MARYS DRIVE
EVANSVILLE IN 47715

SMITH,THEODORE J DM 174
1819 MID OCEAN CIR
SARASOTA FL 33579

SMITH,THOMAS D 082
3217 LAKE AVE
FORT WAYNE IN 46805

SMITH,WILBUR L OR 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

SMITHERMAN,MARVIN L 286
2315 SOUTH STREET
LAFAYETTE IN 47901

SMITLEY,ROGER P — IM — 174
110 RIDGE RD
MUNSTER IN 46321

SMUCKER,ERNEST EDWARD — GS — 070
112 S 5TH AVE
GOSHEN IN 46526

SMUCKER,JON E — GS — 070
112 S 5TH ST
GOSHEN IN 46526

SMYRNIOTIS,FOTIOS E — GE — 098
912 BERKLEY DRIVE
MARION IN 46952

SNAPP,RICHARD A — IM — 014
PARK FLETCHER
2346 S LYNNHURST DR ND B203
INDIANAPOLIS IN 46241

SNEARY,MAX EUGENE — FP — 206
125 BAUM ST
AVILLA IN 46710

SNELL,GARY W — FP — 314
313 EAST UNION ST
LIBERTY IN 47353

SNELL,MALCOLM SHERWOOD — NS — 134
SUITE 24
5506 EAST 16TH ST
INDIANAPOLIS IN 46218

SNIDER,BYRON — DS — 134
16976 DOMINICAN DR
SAN DIEGO CA 92128

SNIDER,DONALD LESTER — GS — 162
202 BROADWAY
VINCENNES IN 47591

SNIDER,ROLAND SIMPSON — FP — 166
2235 DUBOIS ST
WARSAW IN 46580

SNIVELY,WM DANL — IM — 296
RR 1 BOX 277
EVANSVILLE IN 47712

SNODGRASS,ROBT EUGENE — P — 134
532 TURTLE CREEK N DR STE A-1
INDIANAPOLIS IN 46227

SNOWHITE,ARTHUR B — DPH — 098
513 NORTH RIVER DRIVE
MARION IN 46952

SNYDER,CLYDE REID — P — 214
MENTAL HEALTH CENTER
640 SOUTH ROGERS
BLOOMINGTON IN 47401

SNYDER,MORRIS CLAYTON — FP — 314
100 NORTH 15TH
RICHMOND IN 47374

SNYDER,PARKER W — FP — 194
302 N DUKE
PERU IN 46970

SNYDER,RICHARD JEROME — DBG — 062
1111 W JACKSON ST
MUNCIE IN 47303

SNYDERMAN,SANFORD CHAS — DTD — 082
102 MED CTR BLDG
FORT WAYNE IN 46802

SOBAT,WILLIAM SAMUEL — GS — 134
1633 N CAPITOL
INDIANAPOLIS IN 46202

SOBOL,ZBIGNIEW W — ORS — 258
328 N MICHIGAN ST
SOUTH BEND IN 46601

SOE,MINN — AN — 098
4111 WEST MICHAEL DR
MARION IN 46952

SOKOL,ALLEN B — PD — 174
7420 KENNEDY AVE
HAMMOND IN 46323

SOLIS,ROGER VALBERG — DBG — 174
430 CONKEY ST
HAMMOND IN 46324

SOLOMON,SAMUEL — 174
3001 DICKEY RD
EAST CHICAGO IN 46312

SOMANI,INDRA KUMAR — PTH — 174
6195 ARTHUR ST
MERRILLVILLE IN 46410

SOMERS,ALAN BROWNELL — N — 214
711 WEST SECOND ST
BLOOMINGTON IN 47401

SOMERVILLE,JOHN WM — EM — 218
819 SOUTH 3RD
CLINTON IN 47842

SONDGERATH,CLIFFORD JOS — FP — 286
3005 GREENBUSH STREET
LAFAYETTE IN 47904

SONG,JOHN YE KUN — FP — 174
1344 TULIP LANE
MUNSTER IN 46321

SONGER,JOS MICHAEL — IM — 062
4013 W JACKSON ST
MUNCIE IN 47304

SONNE,IRVIN H — R — 078
1546 SUNSET DR
NEW ALBANY IN 47150

SOPER,HUNTER ALEXANDER — IM — 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

SORAK,KATICA — DR — 174
7905 CALUMET
MUNSTER IN 46321

SORCAND-APELLIDO,LIBERACION — AN — 174
2261 MARTHA ST CR #1
HIGHLAND IN 46322

SORG,DAVID ARTHUR — END — 082
2325 SANTA ROSA DR
FORT WAYNE IN 46805

SORIA-NAVARRO,CORAZON E — OBG — 134
STONEGATE PROFESSIONAL PLAZA
46 STONEGATE DRIVE
INDIANAPOLIS IN 46227

SORKIN,SHEILA W — FP — 230
1101 EAST GLENDALE BLVD
VALPARAISO IN 46383

SORRELLS,GEORGE W — PD — 182
2900 W 16TH ST
BEDFORD IN 47421

SOTOLONGO,ELADIO — AN — 134
8807 STAGHORN RD
INDIANAPOLIS IN 46260

SOUDER,BONNELL MARIE — A — 058
206 W 7TH ST
AUBURN IN 46706

SOUDER,MARK S — FP — 082
3217 LAKE AVE
FORT WAYNE IN 46805

SOULE,MARY A — OBG — 134
5214 BRIEF RUN
INDIANAPOLIS IN 46226

SOUTER,MARTHA CHANDLEY — PD — 134
5764 OAKLAND TERR APT C
INDIANAPOLIS IN 46220

SOUTH,DALE R — FP — 070
SIMPSON AND SUPERIOR
ELKHART IN 46514

SOUTH,TERRY A — FP — 296
RR #6 BOX 128
EVANSVILLE IN 47711

SOVINE,JOE W — IM — 134
8182 NORTH ILLINOIS ST
INDIANAPOLIS IN 46260

SOWA,ELIZABETH LEE CLARK — OPH — 296
1015 HULMAN
EVANSVILLE IN 47708

SOWA,RONALD W — ORS — 296
611 HARRIET ST
EVANSVILLE IN 47710

SPAHN,JAMES GABRIEL — OTO — 296
350 W COLUMBIA SUITE 310
EVANSVILLE IN 47710

SPAHR,JOHN FRANKLIN — OBG — 134
3014 GREEN HILLS LANE
INDIANAPOLIS IN 46222

SPAIN,W THOS — OBG — 296
7399 SOUTH SHORE DRIVE
NEWBURGH IN 47630

SPALDING,DAVID LEE — FP — 258
427 LINCOLN WAY EAST
MISHAWAKA IN 46544

SPALDING,JOS JOHN — OPH — 134
7290 N MERIDIAN ST
INDIANAPOLIS IN 46260

SPALDING,WENDELL L — FP — 258
820 LINCONWAY WEST APT 107
MISHAWAKA IN 46544

SPANGLER,JESSE SAML — GS — 126
2126 SOUTH WEBSTER
KOKOMO IN 46901

SPARKS,PAUL WIN — GS — 246
R R 2
WINCHESTER IN 47394

SPEAR,ROBERT K — IM — 296
801 ST MARY'S DRIVE
SUITE 309
EVANSVILLE IN 47715

SPECK,CARLSON RAYMOND — R — 062
BALL MEM HOSP
MUNCIE IN 47303

SPELLMEYER,JOHN CLAIR — R — 314
1401 CHESTER BLVD
REID MEMORIAL HOSP
RICHMOND IN 47374

SPENCE,MICHAEL B — DR — 134
11807 EDEN ESTATES DRIVE
CARMEL IN 46032

SPENCE,WILLIAM CRAIG — 314
1020 NORTH J STREET
RICHMOND IN 47374

SPENCER,BEAUFORT A — A — 214
110 E 10TH ST
BLOOMINGTON IN 47401

SPENCER,C HERBERT — AN — 082
105 THREE RIVERS N
FORT WAYNE IN 46802

SPENCER,FREDERIC — OBG — 162
902 PERRY ST
VINCENNES IN 47591

SPICER,STEPHEN CHARLES — FP — 142
1103 EAST GRACE ST
RENSSELAER IN 47978

SPINDLER,RICHARD GILBERT — OM — 170
300 NORTH TOWNLINE RD
LAGRANGE IN 46761

SPITZBERG,DANL HARVEY — OPH — 134
313 EAST CARMEL DR NO A
CARMEL IN 46032

SPOLYAR,LOUIS WM — PH — 134
1330 W MICHIGAN ST
INDIANAPOLIS IN 46202

SPOLYAR,THOS MICHAEL — OM — 134
320 NORTH MERIDIAN STREET
INDIANAPOLIS IN 46204

SPRAY,PAGE EDWARD — FP — 070
320 W HIGH ST
ELKHART IN 46514

SPRECHER,HERMAN C CRS 296
5040 BELLEMEADE
EVANSVILLE IN 47715

SPRECHER,JAMES JOHN J FP 178
900 'I' ST
LA PORTE IN 46350

SPRINGSTUN,GEO HOBART US 162

OAKTOWN IN 47561

SPURGEON,CHARLES HADDON N 134
2500 WEST 42ND ST
INDIANAPOLIS IN 46208

SPURGIN,GREGORY ALLAN IM 134
3266 N MERIDIAN
INDIANAPOLIS IN 46208

SPURLOCK,FAE HEDRICK P 286
1625 WESTERN
LAFAYETTE IN 47906

SPUTH,CARL BROSIUS OTO 134
5506 E 16TH ST
INDIANAPOLIS IN 46218

SRI,PRASIT ORS 174
8822 BARING
MUNSTER IN 46321

SROKA,STANLEY JOS FP 174
2942 HIGHWAY AVE
HIGHLAND IN 46322

STADLER,HAROLD E PD 134
41 N SHORTRIDGE RD
INDIANAPOLIS IN 46219

STAFFORD,JONATHAN T R 214
RADIOLOGY DEPT
BLOOMINGTON HOSP P O BOX 1149
BLOOMINGTON IN 47401

STAFFORD,TOM MICHAEL OBG 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

STAFFORD,WM CLAYTON IM 118
BOX 97
PLAINFIELD IN 46168

STAKEM,BRIAN EDWARD R 286
2600 GREENBUSH ST
LAFAYETTE IN 47904

STALEY,HARRY L IM 318
303 S MAIN ST
BLUFFTON IN 46714

STALLINGS,HUGH ALOYSIUS OBG 296
P O BOX 5525
EVANSVILLE IN 47715

STALLMAN,CARL F FP 206
409 E WAYNE ST
KENDALLVILLE IN 46755

STALTER,GAYLORD W US 326
110 E 10TH ST
NORTH WEBSTER IN 46555

STAMPER,JOS HERBERT AN 186
619 STATE ROAD 67 W
ANDERSON IN 46013

STAMPER,ROBT J FP 186
2117 EAST 5TH ST
ANDERSON IN 46012

STAMPS,THOS EDWARD IM 296
611 HARRIET STREET
EVANSVILLE IN 47710

STANFORD,JOHN R TS 082
3124 EAST STATE BLVD
FORT WAYNE IN 46805

STANGLE,WM J R 214
2303 EAST SECOND ST
BLOOMINGTON IN 47401

STANLEY,JOHN ROBT OBG 062
1111 W JACKSON ST
MUNCIE IN 47305

STANLEY,ROBT GOULD FP 082
3610 BROOKLYN AVE
FORT WAYNE IN 46809

STANSBURY,WM EDWARD FP 134
5601 E 21ST ST
INDIANAPOLIS IN 46218

STARK,WILLIAM A ORS 178
1601 FRANKLIN ST
MICHIGAN CITY IN 46360

STARKS,WILLIAM O ORS 186
3405 NICHOL AVE
ANDERSON IN 46011

STASICK,MURRAY FP 174
7330-38 INDIANAPOLIS BLVD
HAMMOND IN 46324

STAUFFER,RICHARD C ORS 082
2730 E STATE BLVD
FORT WAYNE IN 46805

STAUNTON,HENRY A FP 258
3016 MISHAWAKA AVE
SOUTH BEND IN 46615

STAYTON,CHESTER A R 134
1500 ALBANY ST STE 906
BEECH GROVE IN 46107

STEARLEY,JOHN S FP 214
GOSPORT MEDICAL CENTER
BOX 102
GOSPORT IN 47433

STECKBECK,ROBT LEE AN 318
903 EDGEWATER
FORT WAYNE IN 46805

STECY,PETER FP 174
1923 CLARK AVE
WHITING IN 46394

STEELE,EVERETT B FP 174
318 S EAST ST
CROWN POINT IN 46307

STEELE,HUGH HENDERSON GE 286
2600 GREENBUSH
LAFAYETTE IN 47902

STEELE,LOWELL R CRS 202
2712 BLUFF COURT
BLOOMINGTON IN 47401

STEELE,ROBERT JAMES ON 134
8220 NAAB ROAD
INDIANAPOLIS IN 46260

STEELE,RONALD EDWARD U 134
111 BOW LANE
INDIANAPOLIS IN 46220

STEEN,LOWELL HARRISON IM 174
2450 169TH ST
HAMMOND IN 46323

STEFFEN,JULIUS T FP 302
443 N WABASH ST
WABASH IN 46992

STEFFY,RALPH MAURICE FP 146
504 W ARCH ST
PORTLAND IN 47371

STEGEMOLLER,RONALD FP 118
100 MEADOWS DRIVE
DANVILLE IN 46122

STEGER,BYRON L OS 134
6434 VIST BUTTE
SAN ANTONIO TX 78239

STEICHEN,JAMES BAPTISTE ORS 134
8402 HARCOURT RD STE 217
INDIANAPOLIS IN 46260

STEIGMEYER,DAVID J PD 082
3124 E STATE ST
FORT WAYNE IN 46805

STEIN,MARK H PD 134
8330 NAAB ROAD
INDIANAPOLIS IN 46260

STEIN,RICHARD H AN 162
502 AMERICAN BANK BLDG
VINCENNES IN 47591

STEINEM,JOS LINSCOTT FP 074
818 GRAND AVE
P O BOX 709
CONNERSVILLE IN 47331

STEINER,GREGORY E FP 296
421 CHESTNUT
EVANSVILLE IN 47713

STEINKELER,STEVEN M FP 134
8330 NAAB RD
INDIANAPOLIS IN 46260

STEINMETZ,EDWARD FRANCIS CD 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

STEMER,ALEXANDER A ID 174
800 MAC ARTHUR
MUNSTER IN 46321

STEPHENS,DONALD E FP 134
1440 E 46TH ST
INDIANAPOLIS IN 46205

STEPHENS,DOYLE LYNN HEM 062
RR # 9 BOX 151
BENTON ROAD
MUNCIE IN 47302

STEPHENS,JAMES PICKARD FP 198
215 WARD ST
CRAWFORDSVILLE IN 47933

STEPHENS,LOWELL R FP 086
BOX 185
COVINGTON IN 47932

STEPHENS,ROBT WAYNE OTO 134
12322 BROOKSHIRE PKWY
CARMEL IN 46032

STEPHENS,SUSAN ANN R FP 134
12322 BROOKSHIRE PKWY
CARMEL IN 46032

STEPLETON,JOHN DAVID PTH 314
REID MEM HOSP
RICHMOND IN 47374

STERN,MONA KAUFMAN FP 174
7535 E HAROLD AVE
GARY IN 46403

STERNE,JOHN HOWARD ORS 296
P O BOX 5166
EVANSVILLE IN 47715

STETTBACHER,LYNNE LEE IM 258
1300 SOUTH CLINTON STREET
FORT WAYNE IN 46801

STEURY,ERNEST MILLARD FP 134
BOX 3039 BOMET
SOTIK KENYA EAST AFRICA

STEUSSY,CALVIN N PTH 122
601 HOSIER DR
NEW CASTLE IN 47362

STEVENS,ADAM CHAS R 318
203 W DIAMOND ST
KENDALLVILLE IN 46755

STEVENS,EDWIN W IM 174
7905 CALUMET AVE
MUNSTER IN 46321

STEVENSON,JERRY L PTH 186
2017 MELODY LN
ANDERSON IN 46012

STEWARD,PAUL WAYNE FP 174
12110 GRANT ST
CROWN POINT IN 46307

STEWART,ALAN IM 162
400 S SIXTH ST
VINCENNES IN 47591

STEWART,J FRANK W PUD 162
P O BOX 513
VINCENNES IN 47591

STEWART,JOHN CHAS P 098
911 HAWTHORNE RD
MARION IN 46952

STEWART,L RAY R 296
611 HARRIET ST
EVANSVILLE IN 47714

STEWART,PAUL NORFLEET CHP 134
740 EAST 52ND ST
INDIANAPOLIS IN 46205

STEWART,RALPH WM OPH I62
P O BOX 339
VINCENNES IN 47591

STIBBINS,WARREN EDWARD FP 062
4111 WHEELING AVE
MUNCIE IN 47304

STIER,PAUL LOUIS IM 082
721 BROADWAY
FORT WAYNE IN 46802

STILLER,AILEEN GRIFFIN OBG I78
1200 MICHIGAN AVE
LA PORTE IN 46350

STILLER,ERNEST WM ORS I78
300 WILE ST SUITE #1
LA PORTE IN 46350

STILWELL,BARBARA M L US I34
5140 N MERIDIAN ST
INDIANAPOLIS IN 46208

STILWELL,WM R AN 314
2607 SOUTH C PL
RICHMOND IN 47374

STIMSON,HARRY RENNER FP 258
1815 EAST IRELAND ROAD
SOUTH BEND IN 46615

STINE,MARSHALL E FP I90
424 W SOUTH ST
BREMEN IN 46506

STINSON,WM MEFFORD FP 186
2101 JACKSON ST
ANDERSON IN 46014

STOELTING,J LEWIS OBG 298
1724 N 7TH
TERRE HAUTE IN 47804

STOELTING,ROBT KENNETH AN 134
3666 WALDEN DR
CARMEL IN 46032

STOELTING,VERGIL K AN I34
4706 LAUEL CR
INDIANAPOLIS IN 46226

STOGDILL,WM J FP 258
520 N COQUILLARD
SOUTH BEND IN 46617

STOGSDILL,WILLIS W AN I34
11175 ST ANDREWS LANE
CARMEL IN 46032

STOLL,CHRISTINE A LARSON FP 258
211 NORTH EDDY STREET
SOUTH BEND IN 46617

STOLLER,HARRY JOE FP 258
60466 U S 31 S
SOUTH BEND IN 46614

STOLLER,LEON JUSTUS OBG 296
2 OAK MEADOW PLACE R#BROWNING
EVANSVILLE IN 47711

STOLTZ,ROBT M FP 230
1406 LA PORTE AVE
VALPARAISO IN 46383

STOLTZFUS,GLENN BEECHY PD 070
110 W HIGH PARK AVE
GOSHEN IN 46526

STOLZ,THOS J FP 286
BOX 398
NORTH MEADOW
OTTERBEIN IN 47970

STONE,ALVIN T FP 134
6225 NORTH BROADWAY
INDIANAPOLIS IN 46220

STONE,DAVID FRED OS I34
245 SE STEBBINS TERR
PUNTA GORDA FL 33950

STONE,DENNIS E IM 014
380 PLAZA DR SUITE D
COLUMBUS IN 47201

STONE,E M US I58
ROUTE #1 BOX 176
MORGANTOWN IN 46160

STONE,ROBT CHAS FP 206
405 S CAVIN ST
LIGONIER IN 46767

STONE,WM MAURICE OBG I34
3266 NORTH MERIDIAN ST
INDIANAPOLIS IN 46208

STOOKEY,RICHARD DON FP I74
295 S WISCONSIN ST
HOBART IN 46342

STOOPS,JEAN TODD FP 302
400 ASH ST
WABASH IN 46992

STORER,WM R CD I34
3266 N MERIDIAN APT 701
INDIANAPOLIS IN 46208

STOREY,D EDMUND IM 134
1010 E 86TH BLDG 1050
INDIANAPOLIS IN 46240

STOUDER,ALBERT EDWIN GS 290
DOCTORS PARK-RR 4
TIPTON IN 46072

STOUT,HARRY T FP 042
1201 OAK ST
FRANKFORT IN 46041

STOVALL,ALFRED FP 082
332 E PONTIAC ST
FORT WAYNE IN 46803

STOVER,MERVIN C PD 174
7905 CALUMET AVE
MUNSTER IN 46321

STRANG,WM C P 134
1815 N CAPITOL AVE SUITE 407
INDIANAPOLIS IN 46202

STRANGE,PAUL S GS 134
8202 SOUTH MADISON ST
INDIANAPOLIS IN 46227

STRANSKY,THEODORE J OPH 296
611 HARRIET ST SUITE 204
EVANSVILLE IN 47710

STRATE,RANDALL W 134
1604 N CAPITOL AVENUE
INDIANAPOLIS IN 46202

STRATIGOS,JOS SPYRIDON PM 258
527 N LAFAYETTE BLVD
SOUTH BEND IN 46601

STRAYER,JOS WM PUD 286
300 VALLEY ST NO 405
LAFAYETTE IN 47905

STRECKER,WM LOUIS AN 298
88 ALLENDALE
TERRE HAUTE IN 47802

STREEPEY,JEFFERSON I FP 078
1919 STATE ST SUTE 205
NEW ALBANY IN 47150

STREETER,RALPH T OBG 134
3131 E 38TH ST
INDIANAPOLIS IN 46218

STREHLER,DON ALLEN PD 318
303 S MAIN ST
BLUFFTON IN 46714

STRIBLING,JAMES LESLIE GYN 014
2529 SANDCREST BLVD
COLUMBUS IN 47201

STRICKER,PAUL JAMES FP 122
701 FAIR OAKS DR
NEW CASTLE IN 47362

STRICKLAND,JAMES W ORS 134
8402 HARCOURT RD
INDIANAPOLIS IN 46260

STRICKLAND,NEIL RICHARD OBG 134
14050 ALLISONVILLE RD
NOBLESVILLE IN 46060

STRINGER,DRENNON DURWOOD IM 258
1035 BANCROFT CIRCLE APT B
MISHAWAKA IN 46544

STROUD,PAUL E OBG 134
5225 LAVA LANE
INDIANAPOLIS IN 46227

STRYCKER,DEAN LA MAR AN 258
2495 REDFIELD ST
NILES MI 49120

STUBBINS,WM MATTHEWS GS 070
1703 RAINBOW BEND BLVD
ELKHART IN 46514

STUCKY,ELSWORTH KEENE FP 134
1349 MADISON AVE
INDIANAPOLIS IN 46225

STUCKY,JERRY LUCAS FP 082
5110 N CLINTON
FORT WAYNE IN 46825

STUCKY,MITCHELL BOWMAN FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

STUDEBAKER,LLOYD R FP 170
300 N TOWNLINE RD
LAGRANGE IN 46761

STUMP,LOYD K IM 134
5626 EAST 16TH ST SUITE 21
INDIANAPOLIS IN 46218

STUMP,THOS ALBERT PTH 134
4486 S MERIDIAN ST
INDIANAPOLIS IN 46217

STUMPF,EDWIN E FP 082
610 PROFFESSIONAL PARK DR
NEW HAVEN IN 46774

STUNTZ,EDGAR CHEADLE P 286
50 VERMONT COURT
LAFAYETTE IN 47904

STURDEVANT,FRANK MOXLEY OBG 230
1101 EAST GLENDALE BLVD
VALPARAISO IN 46383

STURGIS,DONALD GRIFFES FP 034
117 S INDIANA AVE
SELLERSBURG IN 47172

SU,HUEY-JER CD 298
2100 N CENTER
TERRE HAUTE IN 47804

SUELZER,JOHN G ORS 134
3266 NORTH MERIDIAN ST NO 508
INDIANAPOLIS IN 46208

SUESS,ROBT EDWIN IM 134
1702 HARFIELD DR
INDIANAPOLIS IN 46260

SUGARMAN,DONALD RAYMOND R 082
2200 LAKE AVE SUITE 150
FORT WAYNE IN 46805

SUH,YOUNG SOO R 298
1190 GARDEN DRIVE WEST
TERRE HAUTE IN 47802

SULIT,SEVERINO TORRES GS 062
603 E NORTH
HARTFORD CITY IN 47348

SULLIVAN,JAMES JERRY PTH 134
7824 SHADY HILLS DR
INDIANAPOLIS IN 46278

SULLIVAN,JAMES M IM 138
311 HENRY ST
DOCTORS PARK
NORTH VERNON IN 47265

SULLIVAN,ROBT E GS 082
3030 LAKE AVE
FORT WAYNE IN 46805

SUMMERLIN,JACK D OTO 134
6375 AVALON AN E DR
INDIANAPOLIS IN 46220

SUMRALL,ARTHUR JAMES O 134
3231 N MERIDIAN ST
INDIANAPOLIS IN 46208

SUN,CHAW P OBG 174
7905 CALUMET
MUNSTER IN 46321

SUN,CHEN TUNG GS 230
HEBRON CLINIC
HEBRON IN 46341

SURIAN,MICHAEL ANDREW U 214
411 WEST FIRST ST
BLOOMINGTON IN 47401

SURRATT,MARY A NORRIS OPH 134
6160 N MERIDIAN
INDIANAPOLIS IN 46208

SURYANARAYANA,ERAMILLE 062
2810 ETHEL AVE
MUNCIE IN 47302

SUWANWILAI,CHAROEN PTH 174
4321 FIR ST
ST CATHERINE HOSP
EAST CHICAGO IN 46312

SUZUKI,TSUTOMU TOM FP 086
505 WASHINGTON ST
COVINGTON IN 47932

SWAEBY,RONALD L FP 102
LYONS MEDICAL CLINIC
BOX 236
LYONS IN 47443

SWAIM,J FRANKLIN FP 218
P O BOX 185 ANDERSON ST
ROCKVILLE IN 47872

SWANSON,RICHARD THOS IM 296
421 CHESTNUT STREET
EVANSVILLE IN 47713

SWARNER,JOHN L IM 230
645 N LONG LAKE RD 70 E
VALPARAISO IN 46383

SWEARINGEN,ALFRED G R 082
2802 E STATE BLVD
FORT WAYNE IN 46805

SWEENEY,ROBT MUROL PD 258
115 N SUNNYSIDE AVE
SOUTH BEND IN 46617

SWIHART,DANNY DALE FP 070
SIMPSON AND SUPERIOR
ELKHART IN 46514

SWIHART,JOHN JACOB PTH 190
ROUTE 1
ARGOS IN 46501

SWINDELL,SUSAN L PD 106
395 WESTFIELD ROAD
NOBLESVILLE IN 46060

SWINT,ROBERT E IM 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

SYMMES,ALFRED T IM 134
1010 E 86TH ST
INDIANAPOLIS IN 46240

SZALAY,LESLIE US 274
107 SOUTH MAIN STREET
KNOX IN 46534

SZANTO,PHILIP A PTH 174
1152 HOLLY LANE
MUNSTER IN 46321

SZUMILAS,PETER PAUL OBG 186
2009 BROWN ST
ANDERSON IN 46014

SZYMANPWSKI,JAMES EDWARD OBG 314
900 SIM HODGIN PARKWAY
RICHMOND IN 47374

SZYNAL,JOHN S GS 134
2811 E 46TH ST
INDIANAPOLIS IN 46205

TABION,NAPOLEON C U 174
513 RIDGE ROAD
MUNSTER IN 46321

TACKER,WILLIS ARNOLD FP 286
2901 WILSHIRE AVE
WEST LAFAYETTE IN 47906

TADATADA,VICTORIANO JOSE FP 310
103 E MARKET ST
SALEM IN 47167

TALBERT,PIERRE CARL GS 318
303 S MAIN ST
BLUFFTON IN 46714

TALBOTT,DAN EUGENE OBG 134
R R 3 BOX 250A
ZIONSVILLE IN 46077

TALLEY,TERRY WAYNE OPH 296
611 HARRIET ST STE 403
EVANSVILLE IN 47710

TAN,EUGENIO N AN 182
R R 13 BOX 420 ROCKY CREEK E
BEDFORD IN 47421

TAN,JUAN EM 174
60 DOUGLAS
HAMMOND IN 46320

TAN,MANUEL L AN 082
5800 FAIRFIELD AVE
FORT WAYNE IN 46807

TANNER,MARTHA H IM 214
619 W FIRST ST
BLOOMINGTON IN 47401

TANRIKULU,ORHAN PD 174
2450 169TH ST
HAMMOND IN 46323

TANSINSIN,ROSENDO G FP 134
660 SUN VALLEY
INDIANAPOLIS IN 46217

TAPLEY,DWIGHT L FP 258
61047 U S HWY 31 SOUTH
SOUTH BEND IN 46614

TAPNIO,ROGELIO ORDONEZ GE 126
3900 SOUTHLAND AVE
KOKOMO IN 46901

TARRY,KIRBY BRUCE U 014
1920 DOCTORS PARK
COLUMBUS IN 47201

TATE,JAMES ALAN PD 126
P O BOX 2705
KOKOMO IN 46901

TATE,THOS DALE FP 082
3610 BROOKLYN AVE
FORT WAYNE IN 46809

TAUBE,JACK I OPH 134
803 CHAMBER OF COMMERCE BLDG
INDIANAPOLIS IN 46204

TAVEL,MORTON EDWARD CD 134
1139 FREDERICH S DR
INDIANAPOLIS IN 46260

TAYLOR,CLIFFORD C R 134
3720 BRIARWOOD DR E
INDIANAPOLIS IN 46240

TAYLOR,DONALD ROSS R 062
BALL MEM HOSP
MUNCIE IN 47303

TAYLOR,EVERETT CHAS FP 098
BOX 27 A
UPLAND IN 46989

TAYLOR,FREDERIC WM GS 134
40 EAST 43RD ST
INDIANAPOLIS IN 46205

TAYLOR,HAROLD FRANK NM 134
9436 N KENWOOD AVENUE
INDIANAPOLIS IN 46260

TAYLOR,JAMES ALVIN OM 186
DELCO-REMY GMC
ANDERSON IN 46011

TAYLOR,JAMES EDWARD FP 230
2102 EVANS AVE
VALPARAISO IN 46383

TAYLOR,JOHN RICHARD FP 282
105 N MAIN STREET
PALESTINE IL 62451

TAYLOR,MILLARD REED FP 170
BOX 96 A RR2
HOWE IN 46746

TAYLOR,ROBT GEO RHU 082
605 PROFESSIONAL PARK DR
NEW HAVEN IN 46774

TAYLOR,ROBT LEONARD GS 118
206 MEADOW DR
DANVILLE IN 46122

TEABOLDT,GEO ANDREW P 030
1240 N NEW JERSEY ST
INDIANAPOLIS IN 46202

TEAGUE,FRANK W ORS 134
1500 ALBANY ST
BEECH GROVE IN 46107

TEAL,DOROTHY DENZLE FP 014
1901 TAYLOR ROAD APT K 819
COLUMBUS IN 47201

TEEGARDEN,JOS A FP 174
1919 E COLUMBUS DR
EAST CHICAGO IN 46312

TELLE,RICHARD D ID 134
1330 W MICHIGAN
INDIANA STATE BOARD HEALTH
INDIANAPOLIS IN 46202

TELLER,THOMAS F CLP 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

TEMPLETON,IAN SIM GS 138
1130 MEDICAL PL
SEYMOUR IN 47274

TEMPLIN,DAVID BROWNING FP 174
308 E COMMERCIAL AVE
LOWELL IN 46356

TEN BARGE,DAVID PAUL D 296
SUITE NO 207
801 ST MARYS DR
EVANSVILLE IN 47715

TENNANT,DAVID LEWIS OM 082
4802 CALUMET,
FORT WAYNE IN 46806

TERPSTRA,WILLIAM G FP 134
495 WESTFIELD RD
NOBLESVILLE IN 46060

TERRILL,RICHARD W OPH 082
446 W PONTIAC AVE
FORT WAYNE IN 46807

TERRY,LLOYD SHERMAN FP 118
1000 EAST MAIN
DANVILLE IN 46122

TERRY,ROBT HENRY FP 306
316 S 3RD ST
BOONVILLE IN 47601

TEST,CHAS EDWARD IM 134
1559 CONSOLIDATED BLDG
INDIANAPOLIS IN 46204

TETER,GEO VINCENT PD 134
1221 E 86TH ST
INDIANAPOLIS IN 46240

TETER,JAMES LOWELL OBG 134
8220 NAAB ROAD
SUITE #107/
INDIANAPOLIS IN 46260

TETHER,JOS EDWARD IM 134
3266 N MERIDIAN APT 604
INDIANAPOLIS IN 46208

TETRICK,ELBERT L OM 230
NATIONAL STEEL CORP
PORTAGE IN 46368

THARP,DONALD W OPH 246
212 SOUTH MAIN STREET
WINCHESTER IN 47394

THARP,JOHN D U 062
3111 WEST JACKSON STREET
MUNCIE IN 47304

THATCHER,HUGH K FP 134
1010 EAST 86TH ST NO 24
INDIANAPOLIS IN 46240

THAYER,BENET WM FP 140
20 JACKSON ST
NORTH VERNON IN 47265

THEPHASDIN,JIROJ NS 174
SUITE C
8695 CONNECTICUT
MERRILLVILLE IN 46410

THOMAN,REX LEROY IM 134
7338 N CHESTER
INDIANAPOLIS IN 46240

THOMAS,ANDREW CRAIG FP 134
5508 EAST 16TH ST
INDIANAPOLIS IN 46218

THOMAS,CHAS RICHARD OBG 134
9009 E SOUTHPORT RD
INDIANAPOLIS IN 46259

THOMAS,DANL D CRS 174
3290 GRANT ST
GARY IN 46408

THOMAS,EDWARD PAUL A 134
3450 N ILLINOIS
INDIANAPOLIS IN 46208

THOMAS,FRED ARVELLE AN 134
5827 BROADWAY
INDIANAPOLIS IN 46220

THOMAS,GERALD JAY GS 174
3290 GRANT ST
GARY IN 46408

THOMAS,JOHN ROBT OTO 082
347 W BERRY ST
FORT WAYNE IN 46802

THOMAS,LOWELL I ORS 134
28 W HAMPTON DR
INDIANAPOLIS IN 46208

THOMAS,MICHAEL HOLMES U 070
330 LEXINGTON AVE
ELKHART IN 46514

THOMAS,MORRIS E IM 134
1500 ALBANY ST NO 912
BEECH GROVE IN 46107

THOMAS,W CLAYTON FP 106
109 JOHN ST
NOBLESVILLE IN 46060

THOMPSON,BURTIS J PTH 098
MARION GEN HOSP
MARION IN 46952

THOMPSON,CLAUDE N FP 198

WAYNETOWN IN 47990

THOMPSON,EVAN CURTISS FP 170
P O BOX 217
TOPEKA IN 46571

THOMPSON,JOHN M OPH 258
209 SHERLAND BLDG
SOUTH BEND IN 46601

THOMPSON,JOS FRANCIS OBG 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

THOMPSON,LARRY GENE AN 258
604 NORTH MICHIGAN ST
SOUTH BEND IN 46601

THOMPSON,PAUL DE VIZE OPH 134
625 BOARD OF TRADE BLDG
INDIANAPOLIS IN 46204

THOMPSON,ROBT ARTHUR FP 258
53061 CRESTVIEW DR
SOUTH BEND IN 46635

THOMPSON,SAML RICHARD OPH 082
625 W BERRY ST
FORT WAYNE IN 46802

THOMPSON,W TURTON GS 034
1403 YOUNGSTOWN DR
JEFFERSONVILLE IN 47130

THOMPSON,WAYNE H GS 134
5470 E 16TH ST
INDIANAPOLIS IN 46218

THOMPSON,WM R FP 238
111 N MONTICELLO ST
WINAMAC IN 46996

THONG,SIONG-HOAT AN 082
5800 FAIRFIELD AVE
FORT WAYNE IN 46807

THORNTON,MAURICE JOHN R 258
125 W MARION ST
SOUTH BEND IN 46601

THROOP,FRANK B ORS 134
3266 N MERIDIAN ST
INDIANAPOLIS IN 46208

THUPVONG,CHAWTIPYA O AN 174
6401 ARTHUR STREET
MERRILLVILLE IN 46410

THUPVONG,KOSIN COS 174
7895 BROADWAY
MERRILLVILLE IN 46410

THURSTON,FLOYO EDWARO R 266
120 WEST JACKSON STREET
SHELBYVILLE IN 46176

THURSTON,JOHN BRADLEY PS 134
8330 NAAB RD
INOIANAPOLIS IN 46260

THUT,TIMOTHY D 070
111 MARILYN AVE
GOSHEN IN 46526

TICSAY,PENVENIDO V U 178
1225 E COOL SPRINGS
MICHIGAN CITY IN 46360

TIELKER,RICHARO ELMER FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

TIERNEY,WM JOS GS 186
1431 N MADISON AVE
ANDERSON IN 46016

TIFFANY,JOS CALVIN GS 174
6111 HARRISON ST
MERRILLVILLE IN 46410

TIGNOR,STERLING PRESTON GS 126
401 E REYNOLOS DR
KOKOMO IN 46901

TILKA,EDWARD CHAS FP 174
7134 CALUMET AVE
HAMMONO IN 46324

TINOALL,GEO T FP 134
6555 CHESTER E DR
INDIANAPOLIS IN 46220

TINIO,WILFRIDO MORA AN 214
2919 RAMBLE RD WEST
BLOOMINGTON IN 47401

TINSLEY,WALTER B AN 134
8432 W 85TH ST
INOIANAPOLIS IN 46278

TIRMAN,WALLACE S R 258
JEFFERSON MED ARTS BLDG NO 207
SOUTH BEND IN 46622

TIRUCHELVAM,ROHAN L M AN 098
2785 NORTH VALHALLA DR
MARION IN 46952

TISSERANO,JOHN B D 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

TOOO,JOHN RUCKER EM 034
311 HENRY ST
NORTH VERNON IN 47265

TOFAUTE,JOHN L ORS 134
1115 OAKWOOO TRAIL
INOIANAPOLIS IN 46260

TOMAK,MILTON EDWARD FP 102
289 N MAIN ST
LINTON IN 47441

TOMLIN,HUGH MALCOLM IM 062
420 W WASHINGTON ST
MUNCIE IN 47305

TOMLIN,JERROLD E ORS 034
1220 SPRING ST
JEFFERSONVILLE IN 47130

TOMUSK,AUGUST COS 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

TONDRA,JOHN MICHAEL PS 134
8330 NAAB RD
INDIANAPOLIS IN 46260

TOPOLGUS,JAMES N GS 214
403 N WALNUT ST
BLOOMINGTON IN 47401

TOPOLGUS,JAMES N OBG 214
403 N WALNUT ST
BLOOMINGTON IN 47401

TOPPING,MALACHI COMBS ORS 298
843 FAIRLAWN COURT BOX 105
MARCO FL 33937

TORO,JOSE N GE 134
3266 N MERIOIAN ST
INOIANAPOLIS IN 46208

TORRES,JOSE C GS 034
207 SPARKS AVE
JEFFERSONVILLE IN 47130

TOUSSAINT,LINNE FENELON AN 174
9124 S BENNETT AVE
CHICAGO IL 60617

TOWANNASUT,VERAPON OTO 174
6111 HARRISON ST
MERRILLVILLE IN 46410

TOWER,JAMES H FP 266
P O BOX 70
SHELBYVILLE IN 46176

TOWER,THOS KERMIT CD 310
CAMPBELLSBURG IN 47108

TOWLES,JEFF HERMAN GS 082
2513 S CALHOUN
FORT WAYNE IN 46807

TOWNLEY,NORMAND THOS AN 134
3266 N MERIDIAN
INDIANAPOLIS IN 46208

TOYAMA,TSUYOSHI AN 174
713 THORNWOOD DRIVE
SO HOLLAND IL 60473

TRACHTENBERG,LEE H OPH 174
1646 45TH AVE
MUNSTER IN 46321

TRAINER,TOM FRANK ORS 134
2020 W 86TH ST
INDIANAPOLIS IN 46260

TRAN,LAU FP 102
LOT 6 BRROKSIDE ESTATE
LYONS IN 47443

TRANTER,WM FRANK OS 290
2337 FLORA AVE
FORT MYERS FL 33901

TREMOLDA,JUAN A OBG 174
110 RIDGE ROAD
MUNSTER IN 46321

TRENKNER,JOHN DAVID FP 174
7905 CALUMET AVE
MUNSTER IN 46321

TRIER,HERBERT PAUL P 082
2414 FT WAYNE NATL BANK BLDG
FORT WAYNE IN 46802

TRIMBLE,JOHN G OPH 126
402 SOUTH BERKLEY ROAD
KOKOMO IN 46901

TRIPLETT,DOUGLAS A HEM 062
2401 UNIVERSITY AVE
PATHOLOGY DEPT
MUNCIE IN 47303

TRIPLETT,WILLIAM B A 296
3700 BELLEMEADE
EVANSVILLE IN 47715

TRITCH,DAN LEE FP 082
3610 BROOKLYN
FORT WAYNE IN 46809

TROEGER,THOMAS ALBERT HEM 258
912 E LA SALLE
SOUTH BEND IN 46617

TROUT,CARL JOS OPH 286
800 STATE ST
LAFAYETTE IN 47901

TROUT,DAVID JOS OTO 286
2 NORTH 26
LAFAYETTE IN 47904

TROY,JACK MILTON PD 174
2450 169TH ST
HAMMOND IN 46323

TROYER,DANA O OPH 070
201 E CLINTON ST
GOSHEN IN 46526

TROYER,GEO WELDON OBG 070
110 W HIGH PARK AVE
GOSHEN IN 46526

TROYER,MARLIN L ORS 258
328 N MICHIGAN ST
SOUTH BEND IN 46601

TRUOGEN,SPENCER FOLLIOTT OBG 134
2020 WEST 86TH STREET
INDIANAPOLIS IN 46260

TRUSLER,HAROLD MARSHALL PS 134
1144 CONSOLIDATED BLDG
115 N PENNSYLVANIA ST
INDIANAPOLIS IN 46204

TSAI,SAN HUA OBG 174
922 W 52ND DR APT 343
MERRILLVILLE IN 46410

TSENG,CHE-LU GS 238
620 EAST 13TH ST
WINAMAC IN 46996

TUASON,LEONORIO BERSAMIN GS 202
SUNNYSIDE DR BOX 22
MARTINSVILLE IN 46151

TUASON,RICARDO MAURICIO GS 062
920 WEST MAIN STREET
MUNCIE IN 47305

TUBERGEN,LAVERNE B OTO 134
1100 W MICHIGAN
INDIANAPOLIS IN 46202

TUCHMAN,JOS H FP 134
2040 E 46TH ST
INDIANAPOLIS IN 46205

TUCKER,WARREN SAML PUO 134
821 ILLINOIS BLDG
17 W MARKET ST
INDIANAPOLIS IN 46204

TUFEKCIOGLU,EROGAN R 230
802 LA PORTE AVE
VALPARAISO IN 46383

TUHOLSKI,JAMES MARTIN PD 296
20 STEPPING STONE LN
GREENWICH CT 06830

TUMULURI,V S HS 134
3530 SOUTH KEYSTONE #305
INDIANAPOLIS IN 46227

TUNNELL,HARRY DANL GS 082
P O BOX 5164
FORT WAYNE IN 46895

TURGI,ROBT W — OTO — 174
6111 HARRISON ST
MERRILLVILLE IN 46410

TURNER,ANNA LUCINDA GOSS — AN — 150
BOX 313
MADISON IN 47250

TURNER,JOHN PATRICK — FP — 070
115 E WASHINGTON ST
GOSHEN IN 46526

TURNER,MAURICE A — FP — 202
315 NORTH HOME AVE
MARTINSVILLE IN 46151

TURNER,THOS MICHAEL — ORS — 162
609 DU BOIS ST
VINCENNES IN 47591

TURRELL,EUGENE SNOW — P — 134
600 N ALABAMA #1602
INDIANAPOLIS IN 46204

TUSHAN,FAYEZ S — IM — 134
1213 N ARLINGTON AVE
INDIANAPOLIS IN 46219

TUTTLE,JAY R — GS — 162
SURGICAL CLINIC OF VINCENNES
FOURTEEN SOUTH THIRD STREET
VINCENNES IN 47591

TUTUNJI,NERMIN DJAMIL — COS — 258
SUITE 130
720 E CEDAR ST
SOUTH BEND IN 46617

TWEEDALL,DANL CODY — D — 296
715 1ST AVE STE 10
EVANSVILLE IN 47710

TWENTY,JOHN DOUGLAS — FP — 134
1440 EAST 46TH ST
INDIANAPOLIS IN 46205

TYNDALL,JOHN PHILLIP — OBG — 082
3124 E STATE ST
FORT WAYNE IN 46805

TYNER,HARLAN HOWARD — OPH — 134
3663 N DELAWARE
INDIANAPOLIS IN 46205

TYRRELL,JOS J — GS — 174
800 STATE LINE ST
CALUMET CITY IL 60409

TYRRELL,THOS CARROLL — GS — 174
800 STATE LINE ST
CALUMET CITY IL 60409

TZUCKER,JOHN — US — 134
8060 KNUE ROAD #214
INDIANAPOLIS IN 46250

UFKES,HERBERT — FP — 274
108 STAT ST
NORTH JUDSON IN 46366

ULGADO,EDMUNDO SILVANO — FP — 074
1917 GRAND AVE
CONNERSVILLE IN 47331

ULLOM,RALPH B — IM — 134
2020 W 86TH ST STE 201
INDIANAPOLIS IN 46260

ULREY,ROBT PAUL — AN — 296
130 E MILL RD
EVANSVILLE IN 47711

UM,TAI KUN — IM — 296
801 ST MARYS DRIVE NO 309
EVANSVILLE IN 47715

UMPHREY,JAMES E — ENO — 318
303 S MAIN ST
BLUFFTON IN 46714

UNDERHILL,GARY EUGENE — PO — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

UNDERWOOD,GEO MAUZY — FP — 286
JEFFERSON SQUARE
LAFAYETTE IN 47905

UNGEMACH,WILLO FREDERICK — IM — 082
3009 FAIRFIELD
FORT WAYNE IN 46807

UNNI,RAMAKRISHNAN P — U — 174
TWIN TOWERS-SUITE 525
MERRILLVILLE IN 46410

UNZICKER,ROGER GENE — FP — 070
206 W WARREN ST
MIDDLEBURY IN 46540

URBA,VYTAUTAS VICTOR — P — 174
7905 CALUMET
MUNSTER IN 46321

URBAN,CRAIG — IM — 062
BALL MEMORIAL HOSPITAL INC
MUNCIE IN 47303

URBANSKI,WALTER PATRICK — OBG — 174
2513 HIGHWAY AVE
HIGHLAND IN 46322

URGENA,REGINO B — AN — 098
5857 N 500 W RR 1
MARION IN 46952

URRUTI,ARNOLDO HORACIO — P — 258
620 J M S BLDG
SOUTH BEND IN 46601

VACHIRASOMBOON,THONGCHAI — AN — 174
P O BOX 515
CROWN POINT IN 46307

VAGNER,SAML BERNARD — FP — 258
53190 WILLOW RUN RD
SOUTH BEND IN 46637

VAKKUR,GEO JURI — N — 258
211 NORTH EDDY ST
SOUTH BEND IN 46617

VALENA,DOMINADOR V AN 122
1206 N PETTY RD
MUNCIE IN 47304

VALENCIA,MONICO M ABS 174
2606 CENTRAL CENTER
GARY IN 46405

VALENZUELA,DIEGO CASTRO FP 150
305 E MAIN ST
VEVAY IN 47043

VALENZUELA,ROBERTO D FP 174
5490 BROADWAY
MERRILLVILLE IN 46410

VALENZUELA,SOFIA SALOMON PD 174
5490 BROADWAY
MERRILLVILLE IN 46410

VAN BUSKIRK,EDMUND L OPH 286
NO 301
2500 FERRY ST
LAFAYETTE IN 47904

VAN CAMPEN,WARREN MILTON AN 134
8402 HARCOURT ROAD SUITE 701
INDIANAPOLIS IN 46260

VAN DEN BOSCH,WALLACE R P 286
33 N 22ND ST
LAFAYETTE IN 47904

VAN DENBARK,HOWARD M OBG 126
313 C SOUTH BERKLEY RD
KOKOMO IN 46901

VAN FLEET,JOSEPHINE PH 134
1330 W MICHIGAN ST
INDIANAPOLIS IN 46206

VAN FLEIT,WM EDMUND CDS 258
SUITE 130
720 E CEDAR ST
SOUTH BEND IN 46617

VAN HOVE,EUGENE DENNIS NM 134
7816 WINDCOMBE BLVD
INDIANAPOLIS IN 46240

VAN KIRK,JOHN ROBT FP 286
2496 SYCAMORE LANE
WEST LAFAYETTE IN 47906

VAN KIRK,PAUL PHILLIP OS 322
105 WEST WASHINGTON ST
MONTICELLO IN 47960

VAN METER,C POWELL FP 134
5470 E 16TH ST
INDIANAPOLIS IN 46218

VAN NESS,WM CHAS US 186
NO 11 FAIRWAY DR
ALEXANDRIA IN 46001

VAN NESS,WM CHAS FP 186
212 SOUTH MAIN ST
SUMMITVILLE IN 46070

VAN SCOYC,JON DARA FP 106
110 LAKEVIEW DR
NOBLESVILLE IN 46060

VAN TASSEL,CHAS J U 134
8402 HARCOURT ROAD
INDIANAPOLIS IN 46260

VAN VACTOR,HELEN DARE IM 134
1815 N CAPITOL STE 512
INDIANAPOLIS IN 46202

VAN VALER,CONSTANCE R EM 158
344 LAWNWOOD DR
GREENWOOD IN 46142

VAN WIENEN,JOHN FP 202
210 WEST PIKE STREET
MARTINSVILLE IN 46151

VANDER TOLL,DONALD JOHN GS 174
509 RIDGE RD
MUNSTER IN 46321

VANDIVIER,JAMES M IM 134
8402 HARCOURT RD STE 309
INDIANAPOLIS IN 46260

VANDIVIER,ROBT M IM 134
RR 3 BOX 144B
FRANKLIN IN 46131

VAUGHN,WALTER R U 162
615 DUBOIS ST
VINCENNES IN 47591

VEACH,LESTER WARDLAN FP 242

BAINBRIDGE IN 46105

VEACH,RICHARD LESTER FP 242

BAINBRIDGE IN 46105

VEACH,WM L U 298
1235 OHIO ST
TERRE HAUTE IN 47807

VEATCH,RONALD I R 134
3202 N MERIDIAN ST
INDIANAPOLIS IN 46208

VELASQUEZ,ARMANDO GS 174
219 CHAMPLAIN
GLENWOOD IL 60425

VELUZ,MARIO ISAAC P 174
P O BOX 882
GARY IN 46402

VENABLES,ALBERT J PTH 296
420 RUNNYMEADE
EVANSVILLE IN 47714

VERDE,HORACIO V P 230
1742 BEACHVIEW COURT
CROWN POINT IN 46307

VERGARA,ABELARDO F OM 174
2943 42ND ST
HIGHLAND IN 46322

VERMILYA,ROBT WELSH AN 286
1001 LIFE BLDG
LAFAYETTE IN 47901

VESEY,WM JOS OTO 098
711 RIVER DR
MARION IN 46952

VIBUL,SANTI TS 296
801 ST MARYS DRIVE
EVANSVILLE IN 47715

VIEGAS,BRENDA P PD 158
4097 EASY ST
GREENWOOD IN 46142

VIEGAS,OSCAR J AN 134
4097 EASY STREET
GREENWOOD IN 46142

VIEIRA,JOSE THOS FP 242
RD 2 SUNSET LAKE
COATESVILLE IN 46121

VILLA,FLORENCIO CASTILLO GS 246
223 W OAK ST
UNION CITY IN 47390

VILLAMIL,RAMON J IM 318
303 SOUTH MAIN ST
BLUFFTON IN 46714

VILLANUEVA,ONOFRE Q PD 082
1812 BENHAM
FORT WAYNE IN 46815

VILLARIN,ADRIAN V P 314
1350 CHESTER BLVD
RICHMOND IN 47374

VINCENT,WM ADAM IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

VINICOR,FRANK END 134
6199 SPRING MILL ROAD
INDIANAPOLIS IN 46208

VINLUAN,TEOFILO S IM 098
131 N WASHINGTON ST
MARION IN 46952

VIRAY,VICTORIANO G GS 198
804 N DRIVE
CRAWFORDSVILLE IN 47933

VIVIAN,DONALD E DR 122
R R # 4 BOX # 6
NEW CASTLE IN 47362

VIX,VERNON A R 134
RADIOLOGY DEPT
INDIANA UNIV MED CTR
INDIANAPOLIS IN 46202

VIZCARRA,RUBEN FABIAN FP 030
2406 HASTYE HYLL
LOGANSPORT IN 46947

VLASKAMP,ELAINE MARIE FP 062
500 W CHARLES ST
MUNCIE IN 47305

VOGEL,GORDON ALLEN IM 234
1900 WEST 4TH ST
MOUNT VERNON IN 47620

VOGEL,JOHN L IM 326
215 E VAN BUREN
COLUMBIA CITY IN 46725

VOGEL,LAWRENCE JOHN FP 234
1900 WEST FOURTH ST
MOUNT VERNON IN 47620

VOGEL,LLOYD ALBERT EM 082
5944 BUNT DRIVE
FORT WAYNE IN 46816

VOGES,EDWARD CARL FP 298
702 COLLEGE AVE
TERRE HAUTE IN 47802

VOLAN,GEORGE J GS 174
7895 BROADWAY
MERRILLVILLE IN 46410

VOLLRATH,VICTOR JOHN FP 134
5202 N ILLINOIS ST
INDIANAPOLIS IN 46208

VON ASCH,GEO FREDERICK FP 178
2030 MICHIGAN AVE
LA PORTE IN 46350

VON DER HAAR,GERARD A FP 134
5604 SURREY HILL RD
INDIANAPOLIS IN 46226

VON DER LIETH,WM P CAREW GS 162
14 SOUTH 3RD ST
VINCENNES IN 47591

VONDER HAAR,THOS E IM 296
515 READ ST
EVANSVILLE IN 47710

VOORHEES,ROBT JOHN GS 082
2018 FOREST VALLEY DR
FORT WAYNE IN 46815

VOORHIES,MC KINLEY FP 174
1940 MASSACHUSETTS
GARY IN 46407

VORE,ROBT E AN 134
5350 MARMON CIRCLE
INDIANAPOLIS IN 46226

VORMOHR,JOS FRANK FP 146
604 W ARCH ST
PORTLAND IN 47371

VOSKUHL,WM LOUIS FP 034
935 WATER ST
CHARLESTOWN IN 47111

VOSS,GERT OBG 062
3111 WEST JACKSON
MUNCIE IN 47304

WACHOB,TOM W OBG 126
212 EAST LINCOLN ROAD
KOKOMO IN 46901

WACK,JAMES EDWARD FP 258
530 W INDIANA AVE
SOUTH BEND IN 46613

WADDELL,J RONALD GS 296
611 HARRIET ST-STE 501
EVANSVILLE IN 47710

WADLE,ROBERT HAROLD PD 174
7905 CALUMET AVE
MUNSTER IN 46321

WAECHTER,FRANK EDWARD ORG 296
9944 POWER DRIVE
NEWBURGH IN 47630

WAGNER,ARTHUR L FP 066
115 E 9TH ST
JASPER IN 47546

WAGNER,LINDLEY HEATH IM 286
3870 SOUTH ORCHARD CT
LAFAYETTE IN 47905

WAGNER,RICHARD A FP 296
SUITE 450
350 W COLUMBIA ST
EVANSVILLE IN 47710

WAGNER,RICHARD W FP 130
1355 GUILFORD ST
HUNTINGTON IN 46750

WAGNER,VIRGINIA MEADE PD 134
2840 HIGH SCHOOL ROAD
SPEEDWAY IN 46224

WAGNER,WM LESLIE US 118
1655 HAWTHORNE DR
PLAINFIELD IN 46168

WAGONER,BILLY D FP 246
RR 2
UNION CITY IN 47390

WAGONER,DON JARED FP 026
BURLINGTON CLINIC PO BOX 38
BURLINGTON IN 46915

WAGONER,GEO WESLEY FP 026
202 W MAIN ST
DELPHI IN 46923

WAGONER,J EDWARD ORS 286
2525 SOUTH ST
LAFAYETTE IN 47904

WAGONER,JOHN ROBT U 186
215 WEST 19
ANDERSON IN 46014

WAGONER,MARILYN L ASHER FP 026
BOX 324
BURLINGTON IN 46915

WAHLE,WM MONTGOMERY PTH 134
1710 BREWSTER RD
INDIANAPOLIS IN 46260

WAIFE,SHOLOM OMI OS 134
P O BOX 618
INDIANAPOLIS IN 46206

WAINSCOTT,CLINTON S ORS 134
1303 N ARLINGTON AVE STE 10
INDIANAPOLIS IN 46219

WAISS,ELAINE HELEN FP 174
8203 SCHREIBER DR
MUNSTER IN 46321

WAIT,JEROME HERSHAL FP 326
360 N OAK
COLUMBIA CITY IN 46725

WAITS,CHESTER LA VERNE FP 286
49 N 26TH ST
LAFAYETTE IN 47904

WAITT,PAUL MARION GS 106
450 LAFAYETTE ROAD
NOBLESVILLE IN 46060

WAKELAND,DAVID ROLLIN AN 258
604 NORTH MICHIGAN
SOUTH BEND IN 46601

WAKIM,KHALIL GEORGES OS 298
807 SOUTH FIFTH
TERRE HAUTE IN 47807

WAKSMAN,ALBERTO PTH 318
303 S MAIN ST
BLUFFTON IN 46714

WALDO,GUY HAROLD IM 182
2900 W 16TH
BEDFORD IN 47421

WALDO,JEANE THAYER OS 134
420 W 64TH ST
INDIANAPOLIS IN 46260

WALERKO,FRANK U 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

WALKER,ADOLPH PAUL AN 174
8630 LINDEN AVE
MUNSTER IN 46321

WALKER,EDWIN MERCER AN 258
501 N IRONWOOD DR
SOUTH BEND IN 46615

WALKER,FLOYD BROWN FP 082
4927 SOUTH LAFAYETTE ST
FORT WAYNE IN 46806

WALKER,G DALY GS 014
3200 SYCAMORE CT SUITE 1-D
COLUMBUS IN 47201

WALKER,JACK M ORS 062
412 WHITE RIVER BLVD
MUNCIE IN 47303

WALKER,ROBT MURRAY EM 214
RT 1 BOX 242
ELLETTSVILLE IN 47429

WALKER,THOS MARTIN FP 118
P O BOX 36
BROWNSBURG IN 46112

WALLACE,COLLINS ROBT AN 082
126 TIMBERLANE
FORT WAYNE IN 46825

WALLACE,JOHN MANIFOLD FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

WALLACK,ELIOT M N 134
5508 E 16TH ST
INDIANAPOLIS IN 46218

WALSH,JAMES BERNARD IM 174
7905 CALUMET
MUNSTER IN 46321

WALTER,LAWRENCE P 070
111 MARILYN AVE
GOSHEN IN 46526

WALTER,ROBT FREDERICK FP 296
1514 S KENTUCKY AVE
EVANSVILLE IN 47714

WALTERS,CHAS EDWARD GS 258
319 S SPRING ST
MISHAWAKA IN 46544

WALTERS,JACK LEON FP 158
95 E OAK ST
ZIONSVILLE IN 46077

WALTERS,WM HAROLD CRS 178
3714 FRANKLIN ST
MICHIGAN CITY IN 46360

WALTHALL,GERALD CHAS OTO 134
5190 POTTERS PIKE
INDIANAPOLIS IN 46234

WALTHER,JOS E IM 134
3202 N MERIDIAN ST
INDIANAPOLIS IN 46208

WALTON,FRED RICHARD GS 140
311 HENRY STREET
NORTH VERNON IN 47265

WALTON,RICHMOND L PD 098
1251 KEM ROAD
MARION IN 46952

WALTON,WM M U 134
3530 S KEYSTONE #303
INDIANAPOLIS IN 46227

WALTZ,CHARLES A TS 158
P O BOX 446
FRANKLIN IN 46131

WAMBO,JOHN M OBG 314
900 SIM HODGIN PARKWAY
RICHMOND IN 47374

WANG,TIEH CHUN PTH 174
1327 RIDGEWAY
MUNSTER IN 46321

WANGELIN,RICHARD OPH 298
643 OHIO STREET
TERRE HAUTE IN 47807

WANNER,LOREN J OBG 318
303 S MAIN ST
BLUFFTON IN 46714

WARBINTON,FRED PHILLIP FP 198
215 WARD ST
CRAWFORDSVILLE IN 47933

WARD,GERALD FREMONT U 082
3124 E STATE
FORT WAYNE IN 46805

WARD,ROBT ANDERSON FP 222
PROFESSIONAL BLDG
TELL CITY IN 47586

WARD,WESLEY C FP 134
5130 N MERIDIAN
INDIANAPOLIS IN 46208

WARE,HERBERT EARL FP 062
1525 WEST JACKSON
MUNCIE IN 47303

WARFIELD,CHESTER H R 082
7024 FOREST WOOD DR
FORT WAYNE IN 46805

WARN,WM JOHN FP 250
MILAN IN 47031

WARNEKE,CHAS HAGER ORS 134
1815 N CAPITOL
INDIANAPOLIS IN 46202

WARNER,FRANCES WILLIAMS FP 140
241 NORRIS AVE
NORTH VERNON IN 47265

WARNER,T MAX PTH 134
4023 N DRIVE CEDAR HILL
GREENWOOD IN 46142

WARR,ARTHUR CLIVE ORS 082
5050 NORTH CLINTON
FORT WAYNE IN 46825

WARREN,CARROLL B OBG 098
317 N WESTERN
MARION IN 46952

WARREN,JOHN ROBT EM 106
622 SOUTH RANGE LINE ROAD
CARMEL IN 46032

WARREN,ROBT JOE PD 314
1434 CHESTER BLVD
RICHMOND IN 47374

WARRENER,GERALD G 082
3217 LAKE AVE
FORT WAYNE IN 46805

WARRICK,FRANCIS B IM 314
100 N 15TH ST
RICHMOND IN 47374

WARRINER,JAMES BURTON — IM — 134
1012 N EMERSON AVE
INDIANAPOLIS IN 46219

WARVEL,JOHN HENRY — IM — 134
1010 EAST 86TH ST
INDIANAPOLIS IN 46240

WASHINGTON,WILBERT — OPH — 134
5430 GRANDVIEW DRIVE
INDIANAPOLIS IN 46208

WASS,JUSTIN LEO — OR — 134
3401 N RYBOLT APT D
INDIANAPOLIS IN 46222

WATERS,GEO EDWARD — OPH — 134
8402 HARCOURT ROAD NO 815
INDIANAPOLIS IN 46260

WATKINS,LARRY EUGENE — US — 278
301 EAST MAUMEE
ANGOLA IN 46703

WATSON,JAMES RITZ — FP — 082
3217 LAKE AVE
FORT WAYNE IN 46805

WATSON,LEO GENE — OPH — 126
3433 S LAFOUNTAIN
KOKOMO IN 46901

WATSON,STEPHEN CLAIR — EM — 134
R R NO 3
885 SPRING HOLLOW
PLAINFIELD IN 46168

WATTS,EDWIN SCULLY — P — 174
8235 CALUMET AVE
MUNSTER IN 46321

WAY,JAMES ALFRED — OPH — 214
2315 E 3RD
BLOOMINGTON IN 47401

WAYMIRE,WM MERLE — R — 158
101 WALNUT ST
FRANKLIN IN 46131

WAYNE,LISLE — PS — 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

WEAVER,DOROTHY EMILY — OM — 134
3839 E KESSLER BLVD
INDIANAPOLIS IN 46220

WEAVER,R WYATT — FP — 278
1109 W MAUMEE
ANGOLA IN 46703

WEBB,HARRY D — FP — 186
515 CITIZENS BANK BLDG
ANDERSON IN 46016

WEBB,JOAN LIEBENHEIM — P — 062
406 WHITE BLVD
MUNCIE IN 47303

WEBB,MICHAEL KEITH — OBG — 134
2020 WEST 86TH ST
INDIANAPOLIS IN 46260

WEBB,ORVILLE LYNN — FP — 122
420 SOUTH MAIN ST
NEW CASTLE IN 47362

WEBB,WILLIAM J — FP — 130
1255 ENGLE ST
HUNTINGTON IN 46750

WEBER,EDGAR HARTMETZ — OM — 296
3008 E POWELL
EVANSVILLE IN 47715

WEBER,EMIL LEE — NS — 296
611 HARRIET ST
SUITE 301
EVANSVILLE IN 47710

WEBER,JOS G S — R — 298
R R 1 BOX 62
CENTERPOINT IN 47840

WEBER,STEVEN ALLEN — FP — 158
198 EAST JEFFERSON ST
FRANKLIN IN 46131

WEBER,WILLIAM E — PS — 214
822 WEST FIRST ST
BLOOMINGTON IN 47401

WEBSTER,MONICA MAE — IM — 134
2206 N ARLINGTON AVE
INDIANAPOLIS IN 46218

WEBSTER,PAUL L — DR — 286
527 PARK RIDGE
WEST LAFAYETTE IN 47906

WEDDLE,CHAS O — GS — 014
360 PLAZA DRIVE
COLUMBUS IN 47201

WEDDLE,CHAS OTHO — FP — 022
2209 TERRACE LANE
LEBANON IN 46052

WEHLAGE,DAVID FRANCIS — P — 258
634 N LAFAYETTE BLVD
SOUTH BEND IN 46601

WEIDA,JERRY MAYNE — FP — 286
3005 GREENBUSH ST
LAFAYETTE IN 47904

WEINBAUM,JACK G — PTH — 298
BOX 1468
TERRE HAUTE IN 47808

WEINBERG,BENJ A — FP — 174
1104 - 119TH ST
WHITING IN 46394

WEINBERG,HOWARD J — PS — 174
9335 CALUMET AVE SUITE D
MUNSTER IN 46321

WEINLAND,GEO CHITTY — P — 014
2510 SANDCREST BLVD
COLUMBUS IN 47201

WEIR,GEO RUSSELL — PTH — 138
R R 1
BROWNSTOWN IN 47220

WEIR,ROSEMARY E KOELLING — FP — 138
R R 1
BROWNSTOWN IN 47220

WEISENBERGER,BROCKTON L — OM — 014
605 COTTAGE AVE
COLUMBUS IN 47201

WEISKOPF,HENRY S — OPH — I74
6111 HARRISON ST
MERRILLVILLE IN 46410

WEISNER,RICHARD MEREDITH — FP — 062
ROUTE 1
EATON IN 47338

WEISS,ALBERT EMIL — FP — I78
1225 E COOLSPRING
MICHIGAN CITY IN 46360

WEISS,BRIAN H — FP — I74
535 W 35TH ST
GARY IN 46408

WEISS,LOUIS LLOYD — AN — I86
% OUNN MEMORIAL HOSP
BEDFORD IN 47421

WEISS,ROBT M — D — 078
207 PROFESSIONAL ARTS BLDG
NEW ALBANY IN 47150

WEITEMIER,RAYMOND A — PD — 314
1434 CHESTER BLVD
RICHMOND IN 47374

WEITZEL,ROLAND E — FP — 094
114 S HART ST
PRINCETON IN 47670

WELBORN,MELL B — GS — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

WELBORN,MELL BURRESS — TS — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

WELCH,NORBERT M — U — 162
P O BOX 329
GREEN VALLEY AZ 85614

WELOY,BRYCE P — OTO — 062
227 W FRANKLIN ST
HARTFORD CITY IN 47348

WELK,GORDON DANL — FP — 286
ROUTE # 1 BOX # 160
ROSSVILLE IN 46065

WELLER,RALPH DEAN — FP — 286
R R 1 BOX 307
ROSSVILLE IN 46065

WELLER,WENDELL A — OTO — 286
153 PATHWAY LANE
WEST LAFAYETTE IN 47906

WELLMAN,HENRY NELSON — NM — 134
LONG HOSP ROOM 167B
INDIANAPOLIS IN 46202

WELLS,BARBARA O — IM — 214
9 CRANE
SPENCER IN 47460

WELLS,WM RUSSELL — FP — 094
510 N MAIN ST
PRINCETON IN 47670

WENINGER,DONALD LEE — AN — 178
1511 WABASH STREET
MICHIGAN CITY IN 46360

WENZLER,PAUL JORDAN — FP — 214
3901 E 3RD ST
BLOOMINGTON IN 47401

WERTENBERGER,MORRIS D — R — 314
779 GREENMOUNT PIKE
RICHMOND IN 47374

WESEMANN,MERRILL MAX — FP — 158
251 E JEFFERSON ST
FRANKLIN IN 46131

WEST,JOS L — FP — 134
4230 MELBOURNE ROAD
INDIANAPOLIS IN 46208

WEST,ROGER FRANK — PD — 298
221 S 6TH ST
TERRE HAUTE IN 47801

WEST,WM G — FP — 306
P O BOX 558
NEWBURGH IN 47630

WESTERFIELD,GORDON LEE — FP — 126
3421 SOUTH LAFOUNTAIN ST
KOKOMO IN 6901

WESTFALL,B KEMPER — OM — 134
1251 WEST 86TH ST
INDIANAPOLIS IN 46260

WESTHAYSEN,PETER V — NS — I74
BROADMOOR MEDICAL PLAZA
7550 HOHMAN AVE SUITE 300
MUNSTER IN 46321

WEYBRIGHT,WM LEE — FP — 070
206 W WARREN ST
MIDDLEBURY IN 46540

WHARTON,RUTH — 166
P O BOX 497
WARSAW IN 46580

WHEELER,BARTH EDMONSON — FP — 130
1255 ENGLE ST
MEDICAL ARTS BLDG
HUNTINGTON IN 46750

WHEELER,BYRON CLIFFORD — IM — 298
400 8TH AVE
TERRE HAUTE IN 47804

WHEELER,DAVID E — R — 134
1500 N RITTER ST
INDIANAPOLIS IN 46219

WHEELER,EDWARD CORNELIUS R 134
3500 N LAFAYETTE RD
INDIANAPOLIS IN 46222

WHEELER,LAWRENCE A CLP 134
8102 WELLSBROOK DRIVE
INDIANAPOLIS IN 46278

WHITAKER,JACK DAWSON PTH 186
1515 NORTH MADISON AVE
COMMUNITY HOSPITAL
ANDERSON IN 46012

WHITCOMB,ROGER F FP 266
120 W JACKSON ST
SHELBYVILLE IN 46176

WHITE,CHAS FREDRICK PM 134
1633 NORTH CAPITOL AVE
SUITE 460
INDIANAPOLIS IN 46202

WHITE,DONALD J A 134
3524 N MERIDIAN
INDIANAPOLIS IN 46208

WHITE,DOUGLAS H IM 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

WHITE,HARVEY E FP 246
202 S MAIN ST
FARMLAND IN 47340

WHITE,JOHN B ORS 134
5626 E 16TH ST
INDIANAPOLIS IN 46218

WHITE,JOHN PHILIP OTO 214
115 S LINCOLN
BLOOMINGTON IN 47401

WHITE,THOS ROGER CD 296
SUITE 304
611 HARRIET ST
EVANSVILLE IN 47710

WHITFIELD,JAMES E FP 126
3109 WEST SYCAMORE
KOKOMO IN 46901

WHITLOCK,COLEMAN M FP 126
1202 ARUNDEL DRIVE
KOKOMO IN 46901

WHITLOCK,MERLE E GS 258
2118 LINDEN AVE
MISHAWAKA IN 46544

WIATT,LEONARD H EM 122
2716 W FAIROAKS
NEW CASTLE IN 47362

WICK,ALFRED ALBERT OPH 082
2120 CAREW ST
FORT WAYNE IN 46805

WICKSTROM,OTTO W ORS 014
2360 N NATIONAL RD
COLUMBUS IN 47201

WIDDIFIELD,GARTH EUGENE FP 134
532 TURTLE CREEK DR N
INDIANAPOLIS IN 46227

WIERZALIS,EDWARD F FP 082
306 EAST JEFFERSON
FORT WAYNE IN 46802

WIETHOFF,CLIFFORD A GS 138
1131 MEDICAL PL C-9
SEYMOUR IN 47274

WIETHOFF,RICHARD ALLEN GS 138
1131 MEDICAL PL
SEYMOUR IN 47274

WIGUTOW,MARCOS P 174
500 WEST LINCOLN HIGHWAY
MERRILLVILLE IN 46410

WILAND,OLIN K PTH 314
REID MEM HOSP
RICHMOND IN 47374

WILBRANDT,HANS ROBT OPH 134
5912 W 16TH ST
SPEEDWAY IN 46224

WILDER,GORDON BOTKIN IM 186
1337 N NURSERY RD
ANDERSON IN 46012

WILHELM,AGATHA M IM 258
1032 E WAYNE ST
SOUTH BEND IN 46617

WILHELM,GUIDO PAUL OBG 122
1007 N 16TH ST BOX 229
NEW CASTLE IN 47362

WILHELMUS,C KENNETH OM 296
1100 LINCOLN
EVANSVILLE IN 47714

WILHELMUS,GILBERT M FP 296
1028 WASHINGTON AVE
EVANSVILLE IN 47714

WILKENS,IRVIN WM IM 134
4820 E PLEASANT RUN PKWY N DR
INDIANAPOLIS IN 46201

WILKINSON,ROGER LEWIS FP 186
2009 BROWN ST
ANDERSON IN 46014

WILLARD,RICHARD D 278
909 WEST MAUMEE
ANGOLA IN 46703

WILLARDO,ALBERT THOS FP 174
30 DOUGLAS STE 306
HAMMOND IN 46320

WILLHITE,LARRY GALE AN 014
R R 5 BOX 196A
COLUMBUS IN 47201

WILLIAMS,A BERNIECE M FP 082
6632 QUAIL RIDGE LANE
FORT WAYNE IN 46804

WILLIAMS,ALEXANDER S FP 174
436 W 25TH AVE PO BOX 119
GARY IN 46401

WILLIAMS,BRUCE PD 296
801 ST MARYS DRIVE
EVANSVILLE IN 47715

WILLIAMS,CHARLES F 134
5508 E 16TH ST
INDIANAPOLIS IN 46218

WILLIAMS,EARL KENNETH R 030
TWO CHASE PARK
LOGANSPORT IN 46947

WILLIAMS,EDWIN DANL FP 174
628 E 21ST AVE
GARY IN 46407

WILLIAMS,FRANCIS M IM 186
1132 CENTRAL AVE
ANDERSON IN 46016

WILLIAMS,GARY CHAS IM 134
5941 EAST 30TH
INDIANAPOLIS IN 46218

WILLIAMS,HAROLD WARREN FP 134
SUITE 120
8060 KNUE RD
INDIANAPOLIS IN 46250

WILLIAMS,HOWARD S GER 134
3824 NORTH DELAWARE ST
INDIANAPOLIS IN 46205

WILLIAMS,HUGH L ORS 134
5626 E 16TH ST
INDIANAPOLIS IN 46218

WILLIAMS,JACK OWEN IM 296
421 CHESTNUT ST
EVANSVILLE IN 47713

WILLIAMS,JAMES U 134
711 W KESSLER BLVD
INDIANAPOLIS IN 46208

WILLIAMS,LARRY V GE 150
722 W MAIN ST
MADISON IN 47250

WILLIAMS,PAUL ALLAN FP 142
1103 E GRACE ST
RENSSELAER IN 47978

WILLIAMS,PAUL DRAKE P 134
35 MERIDIAN LANE
INDIANAPOLIS IN 46220

WILLIAMS,ROBT D FP 186
2009 BROWN ST
ANDERSON IN 46014

WILLIAMS,ROBT H GS 186
R R 2 BOX 112
ANDERSON IN 46011

WILLIAMSON,ROBERT T OPH 286
2600 GREENBUSH ST
LAFAYETTE IN 47902

WILLIS,CHAS FLEMING FP 296
1100 S BEDFORD AVE
EVANSVILLE IN 47713

WILLIS,ROBT L R 082
2828 FAIRFIELD AVE
FORT WAYNE IN 46807

WILLISON,GEO WYMAN IM 296
3700 BELLEMEADE AVE
EVANSVILLE IN 47715

WILLKE,THOMAS FP 296
801 ST MARY'S DR
FAMILY PRACTICE CENTER
EVANSVILLE IN 47715

WILLMAN,JOE IRVIN PTH 062
RR 1
GASTON IN 47342

WILLS,MARTYN ALLAN OPH 258
50545 MERCURY DRIVE
GRANGER IN 46530

WILLS,MAX B FP 058
347 W 7TH ST
AUBURN IN 46706

WILMS,JOHN H P 286
PURDUE UNIV STUD HOSP
LAFAYETTE IN 47907

WILSON,DAVID AN 296
615 S WILLOW RD
EVANSVILLE IN 47714

WILSON,DONALD LEON OPH 134
1633 N CAPITOL AVE SUITE 488
INDIANAPOLIS IN 46202

WILSON,DOUGLAS JAMES OBG 258
303 S MAIN ST
MISHAWAKA IN 46544

WILSON,FRED LEE CD 298
1501 S 3D ST
TERRE HAUTE IN 47802

WILSON,FRED MADISON OPH 134
R R 2 BOX 296
CARMEL IN 46032

WILSON,FRED MONROE OPH 134
2745 LAKEWOOD DR N
INDIANAPOLIS IN 46280

WILSON,JAMES M GS 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

WILSON,JOHN SMITH FP 326
122 N MAIN ST
COLUMBIA CITY IN 46725

WILSON,NED ARLAN PD 098
317 N WESTERN
MARION IN 46952

WILSON,NORMAN KEITH FP 126
3421 S LAFOUNTAIN ST
KOKOMO IN 46901

WILSON,OLIVER R FP 202
BOX 525
MORGANTOWN IN 46160

WILSON,ORLEY EDWARD FP 070
2505 GREENLEAF BLVD
ELKHART IN 46514

WILSON,PAUL HOBART GS 030
P O BOX 940
WINTER PARK FL 32790

WILSON,RALPH FP 296
517 MARY ST
EVANSVILLE IN 47710

WILSON,ROLAND BYARD FP 082
1207 S LAFAYETTE ST
FORT WAYNE IN 46802

WILSON,WYMOND BURDETTE FP 166
BOX 425
MENTONE IN 46539

WINCE,LELAND LAMAR PD 062
806 W JACKSON ST
CHILDREN'S CLINIC INC
MUNCIE IN 47305

WIND,JOS LEON DR 258
919 E JEFFERSON BLVD
SOUTH BEND IN 46622

WINTER,DONALD K FP 174
3210 WATLING ST
SUITE 8-210
EAST CHICAGO IN 46312

WINTER,WM PERRY FP 202
1390 E COLUMBUS ST
MARTINSVILLE IN 46151

WINTERS,PETER LEE D 134
8402 HARCOURT RD SUITE 305
INDIANAPOLIS IN 46260

WIREY,HAROLD RAY FP 134
4906 S SHERMAN
INDIANAPOLIS IN 46227

WIRTZ,DAVID LEONARD IM 070
111 MARILYN AVE
GOSHEN IN 46526

WISE,CHAS LOWELL FP 026
BOX 5
CAMDEN IN 46917

WISE,WM R FP 134
2372 LAFAYETTE RD
INDIANAPOLIS IN 46222

WISEMAN,EARLE VANNOY GS 242
6 DURHAM ST
GREENCASTLE IN 46135

WISEN,MARK N 214
711 WEST SECOND ST
BLOOMINGTON IN 47401

WISSMAN,WM LEE AN 014
295 LINDEN LANE
COLUMBUS IN 47201

WITHAM,RICHARD STEVEN GS 202
1630 S OHIO ST
MARTINSVILLE IN 46151

WIXTED,JOHN FRANCIS OPH 258
PRAIRIE CLUB CAMP HAZEL HURS
HARBERT MI 49115

WIXTED,JULIA M LUNDSTROM OPH 258
PRAIRIE CLUB CAMP HAZEL HURS
HARBERT MI 49115

WOERNER,LAUREL JEAN IM 134
8402 HARCOURT RD STE 705
INDIANAPOLIS IN 46260

WOERNER,THOS EDWIN CD 134
8402 HARCOURT RD STE 705
INDIANAPOLIS IN 46260

WOHLFELD,GERALD M R 078
204 MAEVIE DRIVE
NEW ALBANY IN 47150

WOHLFELD,JULIUS B CD 182
1222 15TH ST
BEDFORD IN 47421

WOJCIK,LADISLAS D PD 098
250508EECH LANG
MARION IN 46952

WOLF,GORDON C OBG 286
2600 GREENBUSH STREET
ARNETT CLINIC
LAFAYETTE IN 47904

WOLF,HARRY COHEN FP 134
1265 W 86TH ST
INDIANAPOLIS IN 46260

WOLF,ROBT ALLEN FP 174
1447 OAK PARK DR
MUNSTER IN 46321

WOLF,WM EDWARD AN 178
403 FIRST NATL BANK BLDG
LA PORTE IN 46350

WOLFE,MORTON FRANCIS FP 078
1919 STATE ST
NEW ALBANY IN 47150

WOLFE,NELSON ALBERT FP 078
205 PROFESSIONAL ARTS BLDG
NEW ALBANY IN 47150

WOLFF,LARRY H OPH 174
9333 CALUMET SUITE B
MUNSTER IN 46321

WOLFRAM,DONALD J IM 134
5716 N PENN ST
INDIANAPOLIS IN 46220

WOLTER,CHARLES F GE 138
402 W TIPTON ST
SEYMOUR IN 47274

WOLVERTON,GEO M — FP — 034
647 EASTERN BLVD
CLARKSVILLE IN 47130

WONER,JOHN WM — FP — 102
390 A ST N E
LINTON IN 47441

WONG,NORMAN FRANCIS — FP — 286
500 SAGAMORE PARKWAY W
SUITE 3A SQUARE
WEST LAFAYETTE IN 47906

WONG,SAML NIEN TSU — GS — 174
30 DOUGLAS ST
HAMMOND IN 46320

WONGSE SANIT,YONG YOTS — AN — 174
10806 HENDRICKS PLACE
CROWN POINT IN 46307

WONGSE-SANIT,VATCHARA M — AN — 174
10806 HENDRICKS PL
CROWN POINT IN 46307

WOOD,DONALD E — IM — 134
6467 W HOLIDAY DR
INDIANAPOLIS IN 46260

WOODALL,JOHN WESLEY — FP — 186
1302 S MADISON AVE
ANDERSON IN 46011

WOODALL,ROBT LOUIS — PS — 296
1400 NORTH ST
WASHINGTON IN 47501

WOODARD,ABRAM S — FP — 134
665 E 61ST ST
INDIANAPOLIS IN 46220

WOODBURN,ROBERT T — HEM — 174
8127 MERRILLVILLE RD
MERRILLVILLE IN 46410

WOODBURY,CLARENCE R — ORS — 186
3405 NICHOL AVE
ANDERSON IN 46011

WOODEN,THOS FRANKLIN — AN — 174
8354 PARKVIEW AVE
MUNSTER IN 46321

WOODMAN,KENNETH S — GS — 314
1250 CHESTER BLVD
RICHMOND IN 47374

WOODS,ARBA LEONARD — OS — 234
P O BOX 271
POSEYVILLE IN 47633

WOODWARD,BEN E — ORS — 296
P O BOX 5166
EVANSVILLE IN 47715

WOODWARD,WM M — IM — 230
R R 1 BOX 55A
WESTVILLE IN 46391

WOOLERY,RICHARD HENRY — AN — 182
1404 16TH STREET
BEDFORD IN 47421

WOOLLING,KENNETH R — CD — 134
1815 N CAPITOL
INDIANAPOLIS IN 46202

WOOTEN,MONA F — FP — 296
421 CHESTNUT ST
EVANSVILLE IN 47713

WOOTEN,WILLIAM GODFREY — FP — 296
WELBORN CLINIC
421 CHESTNUT ST
EVANSVILLE IN 47713

WORK,BRUCE ALEXANDER — FP — 042
1252 S JACKSON
FRANKFORT IN 46041

WORKMAN,BARBARA E — R — 062
2401 UNIVERSITY
MUNCIE IN 47303

WORKMAN,FRANK — IM — 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

WORLEY,HENRY LEE — OPH — 078
601 E SPRING ST
NEW ALBANY IN 47150

WORLEY,JOS PAUL — FP — 134
5839 E WASHINGTON ST
INDIANAPOLIS IN 46219

WORTH,CLARENCE W — FP — 254
R R 2
LAUREL IN 47024

WORTH,ROBT MILTON — NS — 134
704 BRAESIDE SOUTH DR
INDIANAPOLIS IN 46260

WRENN,ROBT EMMETT — OBG — 214
711 WEST 2ND ST
BLOOMINGTON IN 47401

WRIGHT,JOS WM — OTO — 134
5506 EAST 16TH ST STE 22
INDIANAPOLIS IN 46218

WRIGHT,JOS WM — OTO — 134
5506 E 16TH ST
INDIANAPOLIS IN 46218

WRIGHT,ROSS STANLEY — GS — 182
2900 W 16TH ST
BEDFORD IN 47421

WU,L Y FRANK — PDA — 134
8402 HARCOURT ROAD
INDIANAPOLIS IN 46260

WU,STEWART CHIU HAO — GS — 230
104 MAYFIELD AVE
VALPARAISO IN 46383

WURSTER,RICHARD EDMUND — U — 134
5508 E 16TH ST
INDIANAPOLIS IN 46218

WYLIE,ROBT REED — FP — 174
1356 S LAKE PK
HOBART IN 46342

WYTTENBACH,JOHN EDWARD OM 134
5808 EASTVIEW CT
INDIANAPOLIS IN 46250

YACKO,MICHAEL LOUIS AN 134
5341 N CHANNING RD
INDIANAPOLIS IN 46226

YAHNKE,DAVID GROSS OBG 014
2D4D DOCTORS PARK
COLUMBUS IN 472D1

YALE,CHAS A EM 098
5D4 S WALNUT ST
FAIRMOUNT IN 46928

YANG,IN WHAN OBG 174
80D MAC ARTHUR BLVD
SUITE 12-B
MUNSTER IN 46321

YARLING,JOHN LEWIS P 062
R R 9 BOX 437
MUNCIE IN 473D2

YAST,CHAS JOS OTO 174
6111 HARRISON ST
MERRILLVILLE IN 4641D

YAW,PETER BARNETT GS 134
1DD1 WEST 10TH ST
WISHARD MEMORIAL HOSPITAL
INDIANAPOLIS IN 462D2

YEE,LUCIO CHIONG FP 174
1211D GRANT ST
CROWN POINT IN 463D7

YEGERLEHNER,ROSCOE S FP 286
2514 CONSTITUTION BLVD
SARASOTA FL 33581

YEPURI,C RAM IM 034
63D EASTERN BLVD
CLARKSVILLE IN 47130

YEPURI,NANDALAL 034
63D EASTERN BLVD
CLARKSVILLE IN 4713D

YERETSIAN,ARA KHOREN P 174
8585 BROADWAY BOX 111
MERRILLVILLE IN 4641D

YERGLER,WILLARD G ORS 258
328 N MICHIGAN ST
SOUTH BEND IN 46601

YERKS,THOMAS LEE FP 134
6415 CASTLEWAY DRIVE
INDIANAPOLIS IN 4625D

YINGLING,ROBT JAMES R 134
7601 SILVERPINE COURT
INDIANAPOLIS IN 46250

YLAGAN,LUIS B AN 230
M R 35 BOX 48
VALPARAISO IN 46383

YOCUM,MICHAEL WINSTON A 062
2724 W NORTH ST
MUNCIE IN 473D3

YOCUM,PAUL S OPH 174
7863 BROADWAY
MERRILLVILLE IN 46410

YOCUM,PAUL STONE GS 278
4826 ALHAMBRA CIRCLE
CORAL GABLES FL 33146

YOCUM,WM STONE GS 174
3656 GRANT
GARY IN 46408

YODER,C RICHARD PD 070
6D3 OAKLAND AVE
ELKHART IN 46514

YODER,CARL JESSE FP 070
206 W WARREN
MIDDLEBURY IN 46540

YODER,DEWEY DWAYNE OPH 326
R D 1
PIERCETON IN 46562

YODER,JONATHAN GLEN FP 07D
900 LEROY AVENUE
GOSHEN IN 46526

YODER,RICHARD PHILIP IM 318
CAYLOR-NICKEL CLINIC
BLUFFTON IN 46714

YOLLES,ELLIOTT A OPH 134
50 EAST 91ST ST
INDIANAPOLIS IN 4624D

YONKMAN,GERHARD FLORIAN FP 134
SUITE 133
8D60 KNUE RD
INDIANAPOLIS IN 4625D

YOU,KWANG-DUCK TS 174
80D MAC ARTHUR
MUNSTER IN 46321

YOUNG,CLAUDE CURTIS OBG 296
326 S E 7TH ST
EVANSVILLE IN 47708

YOUNG,EUSEBIO C IM 134
5506 E 16TH ST
INDIANAPOLIS IN 46218

YOUNG,FREDERIC DOUGLAS OPH 174
1646 45TH AVE
MUNSTER IN 46321

YOUNG,GERALD STRAUSS PD 062
924 W MAIN ST
MUNCIE IN 47305

YOUNG,JOHN E ORS 134
5626 E 16TH ST
INDIANAPOLIS IN 46218

YOUNG,JOHN MC CONNELL U 134
4535 MARCY LANE NO 261
INDIANAPOLIS IN 46205

YOUNG,JOHN T PD 134
3151 N ILLINOIS ST
INDIANAPOLIS IN 46208

YOUNG,JOS WM FP 158
904 BEECH DRIVE
GREENWOOD IN 46142

YOUNG,RALPH HUBERT OM 070
113 E MADISON ST
GOSHEN IN 46526

YOUNG,ROBT LAWRENCE OPH 174
1646 45TH AVE
MUNSTER IN 46321

YOUNG,ROLANDO C N 034
MEDICAL ARTS BLDG
207 SPARKS AVE
JEFFERSONVILLE IN 47130

YOUNG,STEVEN ROBT AN 134
1807 BOX ELDER CT
INDIANAPOLIS IN 46260

YOUNG,WARREN WILLIAM OM 296
600 CULLEN AVE APT 1010
EVANSVILLE IN 47715

YOUNGMAN,JAMES DOUGLAS P 214
MENTAL HEALTH CENTER
640 SOUTH ROGERS
BLOOMINGTON IN 47401

YOUNGS,PAUL EARL US 078
104 PROFESSIONAL ARTS BLDG
NEW ALBANY IN 47150

YUHN,ROBERT B P 070
500 NORTH NAPPANEE ST
EXECUTIVE 500 #11B
ELKHART IN 46514

YUNE,HEUN YUNG DR 134
1100 W MICHIGAN ST
INDIANAPOLIS IN 46202

ZABANEH,SAMIR I OBG 174
7905 CALUMET
MUNSTER IN 46321

ZAHRT,FRANK H FP 178
506 K STREET
LA PORTE IN 46350

ZALAC,DONALD ALBERT R 178
SPRINGLAND AVENUE POTT PARK
MICHIGAN CITY IN 46360

ZALLEN,STANLEY GEO FP 174
6933 KENNEDY
HAMMOND IN 46323

ZAWADSKY,SARETTE CYNTHIA IM 286
2496 SYCAMORE LANE
WEST LAFAYETTE IN 47905

ZECKEL,MICHAEL LEE IM 134
3130 N MERIDIAN ST
INDIANAPOLIS IN 46208

ZEGARRA,R F EM 266
150 W WASHINGTON
SHELBYVILLE IN 46176

ZEIER,FRANCIS G HS 296
3708 MULBERRY ST
EVANSVILLE IN 47715

ZEIGER,IRVIN LEWIS FP 258
9611 APPALOOSA DRIVE
SUN CITY, AZ 85373

ZEITLER,PHILIP S ORS 070
1332 W INDIANA AVE
ELKHART IN 46514

ZELL,EVERTSON HYLE GS 134
P O BOX 201
VERNON IN 47282

ZENT,DON PAUL FP 126
806 S BERKLEY RD
KOKOMO IN 46901

ZERFAS,CHAS PERRY-ALLEN FP 134
107 D KNOLL COURT
NOBLESVILLE IN 46060

ZERFAS,PHYLLIS K CATT OS 134
107 D KNOLL COURT
NOBLESVILLE IN 46060

ZIENCE,JOHN ALAN AN 134
3266 N MERIDIAN #407
INDIANAPOLIS IN 46208

ZIEVERINK,SARA E DR 134
WISHARD HOSP
1001 WEST 10TH ST
INDIANAPOLIS IN 46202

ZIMMER,HENRY JOHN OM 298
3055 POPLAR ST
TERRE HAUTE IN 47803

ZIMMER,JOHN FREDRICK PD 134
1221 E 86TH ST
INDIANAPOLIS IN 46240

ZIMMERMAN,WM HAROLD FP 070
14471 CR-48
SYRACUSE IN 46567

ZINK,ROBT OTTO FP 150
722 W MAIN ST
MADISON IN 47250

ZISS,ROBT C IM 296
216 S E RIVERSIDE DR
EVANSVILLE IN 47713

ZIVICH,JOHN M FP 174
3701 MAIN ST
EAST CHICAGO IN 46312

ZIVNUSKA,FREDERICK R TR 296
615 S NEW BALLAS RD
RAD THER
ST LOUIS MO 63143

ZOLLMAN,CHARLES WALLACE PS 134
1633 N CAPITOL AVE
SUITE 450
INDIANAPOLIS IN 46202

ZORE,JOS JOHN PD 314
1434 CHESTER BLVD
RICHMOND IN 47374

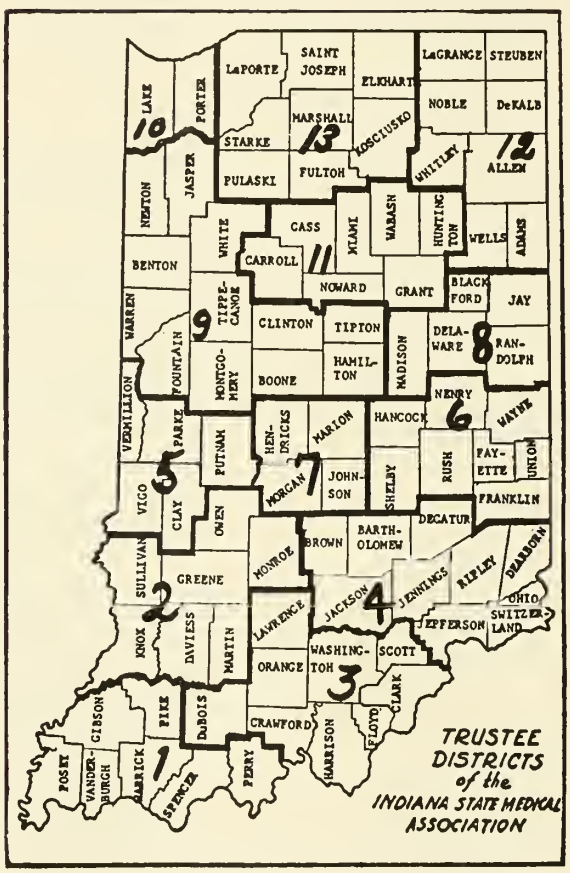
ZUCKER,EDWARD PS 174
7863 BROADWAY
MERRILLVILLE IN 46410

ZURCHER,BRIAN DALE FP 082
3217 LAKE AVE
FORT WAYNE IN 46805

ZWEIG,ELMER S FP 082
2015 PEMBERTON DR
FORT WAYNE IN 46805

ZWICK,HAROLD FREDERICK FP 010
227 S 2D ST
DECATUR IN 46733

ZWICKEL,RALPH EDWARD IM 296
400 DARBY DR
NEWBURGH IN 47630



Roster Of Members By Counties

Physicions ore listed in the county medical society in which they hold membership. See olphabetical list for member's oddress.

ADAMS CO MEDICAL SOCIETY

BIHL,JOHN HELMUT	OM
BOZE,ROBT L	GP
BURK,JAMES MERRYMAN	GP
CARROLL,JOHN CLAYSON	GS
DESTER,HERBERT EDGAR	FP
DOAN,JOHN ELDRIDGE	FP
GIROD,ARTHUR HENRY	FP
LEE,HYUNG SOO	GS
PARRISH,RICHARD K	OPH
REPPERT,ROLAND LE ROY	FP
RICH,NORVAL S	US
ZWICK,HAROLD FREDERICK	FP

BARTHOLOMEW-BROWN CO MED SOC

ABLE,WALTER	FOP
ADKINS,STANLEY RAY	IM
ADLER,DAVID LEO	PTH
AMORINI,MICHAEL F	AN
ANDREWS,FREDERICK BATMAN	DR
BEGGS,LOWELL FREDERICK	GS
BENNETT,RONALD G	ORS
BERKSHIRE,SHAFFER B	R
BREWER,DAVID HAROLD	PD
BRUEGGEMANN,WALTER GEO	OPH
BUSH,ROBT WILLITS	PTH
CHADWICK,MICHAEL JOS	IM
CLAY,ELEANOR	IM
COOPER,WM EARL	OTO
CURE,CHAS WM	NS
DAUGHERTY,FOREST DALE	FP
DAVIS,MARVIN ROBBINS	FP
DUGAN,THOS PATRICK	FP
ECHSNER,HERMAN J	AN
FISHER,WALTER SCOTT	CD
FORSTE,ROBERT LEE	ORS
FORTNER,RAY EDWARD	U
FRANZ,SHERMAN GAYLE	P
FREE,MICHAEL WARREN	FP
FULLER,ROBT GLEN	FP
GAMMELL,LINDLEY LLOYD	AN
GREENWOOD,CHAS WALTER	IM
GREGORY,DAVID LEE	FP
HART,ROBT BRUCE	FP
HATCHER,CHAS MONTE	FP
HAUERSPERGER,ALFRED D	OPH
HAWES,MARVIN E	CD
HELVIE,JANICE L	GPM
HENRY,ALVIN L	OPH
HERRBERG,JEROME EDWARD	FP
HOLDEN,ROBT WATSON	R
HOLDREAD,JON WAYNE	P
JACOBS,E ROBERT	GS
JAMES,CARROLL FLOYD	FP
JEFFREY,ROBERT CHARLES	AN
KIM,CHONG-BIN	PD
KRUEGER,ROBT B	FP
LAGOS,DIOSDADO OGA-OGA	GS
LARSON,DAVID ERIC	PD
LIPSON,JOHN DAVID	GS
LOHEIDE,STEPHEN ROBT	PD
MACY,GEO WEBSTER	GS
MARR,GRIFFITH	AN
MARSHALL,THOMAS WENDELL	ORS
MC CULLOUGH,HENRY G	FP
MC ILROY,RICHARD	U
MOHLER,FLOYD W	ORS
MOORE,DONALD CHARLES	R
NELSON,BRYAN EDWARD	FP
O'BRIEN,DAVID MICHAEL	PTH
O'BRYAN,RICHARD BRUCE	PD
PEARCE,WM LLOYD	OBG
PERRY,GUY FELAND	IM
PORTER,FREDERICK H	
PROBST,EDWARD LOUIS	D
RANCK,BENJ ALBERT	FP
RAU,CHAS ALBERT	FP
REED,ROBT G	PTH
REID,ROBT M	OS
RICE,PAUL HERMAN	N
RICHMOND,HAROLD WAYNE	OM
RODWAY,JOHN SPENCER	FP
RYAN,C DAVID	OBG
RYAN,WM JOHN	GS
SANDLIN,DONALD LEE	FP
SCHERER,JACK ROGER	D
SCHMITT,RICHARD K	FP
SCHNEIDER,KENNETH DALE	AN
SCHNEIDER,LAWRENCE F	FP
SEBAHAR,DUANE ALLEN	IM
SEIBEL,ROBT MARVIN	FP
SHEEHY,JOSEPH C	IM
SIGMUND,WM BELMER	U
SNAPP,RICHARD A	IM
STONE,DENNIS E	IM
STRIBLING,JAMES LESLIE	GYN
TARRY,KIRBY BRUCE	U
TEAL,DOROTHY DENZLE	FP
WALKER,G DALY	GS
WEDDLE,CHAS O	GS
WEINLAND,GEO CHITTY	P
WEISENBERGER,BROCKTON L	OM
WICKSTROM,OTTO W	ORS
WILLHITE,LARRY GALE	AN
WISSMAN,WM LEE	AN
YAHNKE,DAVID GROSS	OBG

BENTON CO MEDICAL SOCIETY

ALTIER,WM HOWARD	GP
CODDENS,AVERY L	FP
CYR,JAMES O	
LEAK,ROBT H	FP
SCHEURICH,MANLEY KING	FP

BOONE COUNTY MEDICAL SOCIETY

BAILEY,LAWRENCE S	GP
BASSETT,MARGARET ANN	FP
BOYER,DON W	GS
COONS,RITCHIE	FP
GREGG,EDWIN EUGENE	FP
HARVEY,RALPH JOHNS	GPM

BOONE COUNTY MEDICAL SOCIETY

HODGES,CHAS DAVID	FP
HONAN,PAUL REVERE	OPH
KERN,CLARENCE GERALD	FP
LENOX,JACK LEONARD	FP
LOVETT,HARVEY D	FP
MC AFEE,JAMES RAYMOND	FP
MUKHTAR,FUAD A	GS
PORTER,JOHN R	FP
SAALWAECHTER,JOHN JACOB	FP
SCHAAF,ALVIN DAVID	FP
WEDDLE,CHAS OTHO	FP

CARROLL COUNTY MEDICAL SOCIETY

BAKER,ELDON ELLSWORTH	FP
ELLER,ALVAN LA VERNE	FP
LANGSTON,EDWARD LEE	FP
MAYERS,STEPHEN CRAIG	FP
MC LAUGHLIN,JAMES R	FP
PETRY,THOS NEAL	FP
SEESE,ROBT M	FP
WAGONER,DON JARED	FP
WAGONER,GEO WESLEY	FP
WAGONER,MARILYN L ASHER	FP
WISE,CHAS LOWELL	FP

CASS COUNTY MEDICAL SOCIETY

BAILEY,EARL W	GS
BEAN,JOS STRATTON	R
BOYD,CARL RITTER	R
BREWER,ROBT ALLEN	OS
BRIGNONL,ANGEL M	P
CALISTO,RUBEN A	FP
CHENG,SYLVIA SIU-FAN	P
CHU,JOHNSON C S	P
DE INNOCENTES,LOUIS WM	TS
DODT,KEVEN W	FP
ECKERT,RUSSELL ALOIS	R
FREDERICK,JOS A	IM
GLENDENING,RICHARD L	FP
HALL,BERNARD RICHARD	OBG
HARGROVE,TERRY KENT	IM
HILLIS,FREDERICK ALLEN	GS
HILLIS,LOWELL JOS	FP
HORNING,RICHARD R	IM
HOWARD,JOS DANL	FP
JONES,JOHN CARL	PD
KARNAFEL,EUGENE THADDEUS	P
KING,JAY M	GS
LIEBNER,MICHAEL S	
LUXENBERG,EDWIN RALPH	PD
MAMARIL,BLAS FLORES	FP
MILLER,GARY LEE	GS
MORRICAL,DAVID L	IM
MORRICAL,RUSSELL J	FP
NEWCOMB,WM KENDALL	FP
PARKER,E CAMILLE KILLIAN	OPH
PARKER,FRANCIS WM	OPH
PEDDICORD,CLIFFORD R	DR
PFUETZE,MAX ENSIGN	OM
SHELLER,TOM GEO	P
TEABOLDT,GEO ANDREW	P
VIZCARRA,RUBEN FABIAN	FP
WILLIAMS,EARL KENNETH	R
WILSON,PAUL HOBART	GS

CLARK COUNTY MEDICAL SOCIETY

ARCHANGEL,CESAR S	P
BAUTISTA,WARLITO AVILES	IM
BIZER,MIER A	GP
BORDADOR,TEODORO E F	P
BRILL,JOS B	P
BUEHLER,GEO MICHAEL	GP
CANNON,DAVID R	R
CARR,JOE HENDERSON	FP
CLARK,WM B	FP
CORRAO,THOS JOS	FP
COSIO,JULIO ELIO	FP
DRAUS,JOHN MARTIN	GS
DUQUE,FAUSTO	AN
ELY,CECIL W	R
FORSEE,NORMAN EDWARD	FP
FULTZ,ROY LEE	AN
GOLDEN,WM YOUNG	FP
GOLDSTEIN,RICHARD M	GS
GOODMAN,ELI	FP
GOSSMANN,G WILLIAM	
GREENE,WM RAY	EM
GUTMANN,GORDON LIEBREICH	GS
HADDAD,ROLANDO IGNACIO	P
HARGETT,HERBERT P	OPH
HAVENS,A LYLE	FP
HAVENS,THOS R	P
HEIDEMAN,HARRY DAVID	R
HINES,KENNETH EARLE	FP
HORLANDER,FRIDOLIN SCOTT	FP
HUONI,JOHN SIMEON	FP
HUSSAIN,MOHAMMED	CD
IGNACIO,OLEGARIO J	N
JIMENEZ,PEDRO L	AN
JOHN,MAURICE EDWARD	OPH
JONES,DAVID HALE	FP
JORDAN,RICHARD ALLEN	FP
KEMPER,CHARLES F	PDA
LEGA,ROBT EUGENE	PD
MASSER,FRANCES JOAN	PTH
MATIBAG,VICTOR PAPA	N
MAYHUE,HUGH WAYNE	OBG
MC CLOUD,L C	PTH
MC KECHNIE,ROBT KELLAR	FP
MEYER,CLAUDE JAMES	FP
MILLAN,JOSELITO LECAROS	NS
MONTOYA,RUBEN E	AN
MUDD,JOS PAUL	FP
NEATHAMER,THOS ALFRED	FP
OCA,CLEMENTE FERNANDEZ	CD
OWEN,HUGH THOS	D
PATIENCE,IAN M	US
RAMOS,LEONARDO POSADAS	FP
RANGASWAMI,R	PD
REED,EDSEL SHERWOOD	R
RIEHL,RICHARD EMIL	IM
ROBERTSON,ROBT E	FP
ROBY,ALMA LEE	PD
RUDWELL,GEO HENDERSON	OTO
SHINA,HASSI	FP
STURGIS,DONALD GRIFFES	FP
THOMPSON,W TURTON	GS
TODD,JOHN RUCKER	EM
TOMLIN,JERROLD E	ORS
TORRES,JOSE C	GS
VOSKUHL,WM LOUIS	FP
WOLVERTON,GEO M	FP
YEPURI,C RAM	IM
YEPURI,NANDALAL	
YOUNG,ROLANDO C	N

CLAY COUNTY MEDICAL SOCIETY

BUELL,FORREST RAYMOND	GP
CONRAD,EVERETT LEROY	FP
FARID,RAHIM	GS
FRODERMAN,STANLEY EARL	GS
MOON,CHAS E	FP
OEHLER,NANCY LEE MARTIN	PM
OEHLER,ROBT CURTIS	IM
SARKAR,DIPA	
SHATTUCK,JOHN CHAS	FP

CLINTON COUNTY MEDICAL SOCIETY

APPLEGATE,A EARL	GP
BEARDSLEY,FRANK A	GP
BUSH,CHAS EDGAR	GP
DUPLER,LEE FORREST W	IM
DYKHUIZEN,THEODORE A	U
ERDEL,MILTON WM	OTO
HAMMERSLEY,GEO K	GS
HEDGCOCK,ROBT ANDREW	FP
PIPPENGER,WAYNE GRISE	FP
STOUT,HARRY T	FP
WORK,BRUCE ALEXANDER	FP

DAVIESS-MARTIN CO MED SOCIETY

BARRETT,JAMES WM	GS
BECK,JAMES PHILLIP	IM
BENNETT,DICK L	AN
BLAZEY,ARTHUR GAIUS	GP
CHATTIN,ROBT EARL	FP
CHATTIN,VANCE JOHN	GS
COULTER,MERLIN KENNETH	FP
DAVIS,THOS WM	FP
HEYMANN,ROBT LAWRENCE	GS
KAVEGGIA,LASZLO	U
LETT,E BRISCOE	FP
LINDSAY,HAMLIN BERRY	GS
MC KITTRICK,JACK	FP
MC NAUGHTON,THOS MARVIN	FP
NORTON,HORACE	FP
PIERCE,WM J	PTH
RANG,ROBT HALTER	GS
ROHRER,JAMES ROBT	AN
ROSS,GLENN ELRICK	GER
SCHAFER,WM CHAS	OPH
SEARS,DON ALVIN	FP
SEAT,MARSHALL H	FP

DEARBORN-OHIO CO MED SOCIETY

BAKER,LESLIE MAYER	GP
BOWEN,GERALD THOS	FP
CONRAD,HENRY WEBB	FP
DE PALMA,BRUNO	R
DIZON,RUSTICO HIPOLITO	AN
FESSLER,GORDON SOISTER	FP
FRABLE,FRANK L	GS
GILL,HARBANS SINGH	IM
GOEL,VIJENDER NATH	
HACKETT,JAMES K	DR
HOUSTON,FRED DURMENT	FP
LINDGREN,IVAN THURE	FP
MARTINEZ,GUILLERMO G	GS
MC NEELY,MATTHEW J	FP
MORRISON,GEO GORDON	FP
MYERS,RONALD LEE	P
RAHMAN,SHEIKH ABDUL	US
RHODES,ALFRED KEITH	OBG
SCHNELL,FREDERICK	
SCUDDER,GARY EVANS	FP

DECATUR COUNTY MEDICAL SOCIETY

ACHER,ROBT PAUL	GP
BALUYOT,GREGORIO R	OBG
DAFTARY,MOSTAFA	GS
DICKSON,DALE DONALD	FP
DOMINGO,RICARDO C	FP
DUCANES,ARNOLD DELLOTA	FP
GEBELE,GENE P	PTH
MILLER,JAMES CATRON	FP
MORRISON,JAMES TREVOR	FP
SHAFFER,WM R	AN

DE KALB COUNTY MEDICAL SOCIETY

CARRUTHERS,WALLACE B	GS
COLEMAN,FLOYD BUTLER	FP
COVELL,HARRY MENLO	FP
EDWARDS,JOHN ROBT	GS
GRABER,BENJ ROBT	FP
HARVEY,JOHN CHRISTIE	FP
HATHAWAY,CLAYTON B	FP
HATHAWAY,WM HENRY	FP
HINES,JOHN HENRY	FP
HIPPENSTEEL,HARLAND V	FP
HUGHES,WM BRADLEY	FP
JINNINGS,LOREN EARL	FP
KANTZER,FLOYD BERNHARD	
NASON,ROBT ALLEN	FP
NOVY,CHAS AUGUST	FP
SHULTZ,CLIFFORD JAMES	FP
SOUDER,BONNELL MARIE	A
WILLS,MAX B	FP

DELAWARE-BLACKFORD CO MED SOC

ADAMS,JULIA LINDSAY	GP
ADAMS,WM B	AN
ALEXANDER,JACK LEE	PD
ALVEY,CHAS ROBT	FP
ANTALIK,THOS JOHN	GS
ASHBURN,CLARENCE MILLER	AN
BALDWIN,JAMES R	PTH
BALL,CLAY ADRA	GP
BALL,W PHILIP	IM
BALTZER,DONALD JAN	AN
BARTHOLOME,CHARLES W	D
BASAVARA,HIREMAT	AN
BENKEN,LAWRENCE D	OBG
BERGWALL,WARREN L	FP
BERKER,BEDII S	AN
BERNER,HERBERT WM	OBG
BETRAS,STEVEN A	PTH
BOBERG,ARTHUR RICHARD	IM
BORDER,JOHN FRANKLIN	CD
BOTKIN,CHAS THOS	GP
BOTKIN,CLYDE GARRETT	GP
BRANAM,GEO EVERETT	PTH
BREITENFIELD,RICHARD V	NEP
BROWN,LELAND G	ORS
BROWN,STEWART DALE	FP
BROWN,THOS MARTIN	IM
BURNS,ANTHONY JOHN	AN
BURNS,PAUL EARLAND	GP
BYRN,JAMES RICHARD	PD

DELAWARE-BLACKFORD CO MED SOC

CARTER,ARNOLD LAWRENCE	FP
CAUDILL,RODNEY C	P
CLARK,LINTNER EARL	R
CLARK,ROBT M	OPH
CLOUSE,JOHN FRANKLIN	FP
COLE,LARRY GENE	FP
COOLEY,PAUL PHILLIP	FP
COOPER,JOHN FREDRICK	FP
COULON,THOS FRANCIS	GS
COVALT,WENDELL EARL	GS
CULLISON,JOHN L	IM
CURE,ELMER T	P
DERSCH,DAVID MATHEWS	OBG
DIETZ,DAVID JACKSON	FP
DOLES,TED SCOTT	FP
DOLLENS,DAVID EDWIN	IM
DOWELL,ANTHONY REED	PUD
DURBIN,JOHN PAUL	GS
EGGER,ROSS L	FP
EGLEN,DOUGLAS E	HEM
FAWCETT,ROBERT S	
FISHER,WILLIAM B	IM
FOSSUM,ROGER M	PTH
GALLIHER,MARJORIE JANE	FP
GARDINER,THOMAS K	IM
GECKLER,CHAS ELMER	PTH
GIBSON,BRUCE ANTHONY	IM
GIBSON,ROBT KEITH	PD
GOODELL,CHAS LEEPER	NS
GRAY,STUART ALLEN	OS
GRAY,WAYNE LEE	CD
GUSTAFSON,MILTON HENRY F	D
HABANSKY,ALAN J	ORS
HALL,ROBT SANDFORD	FP
HAYES,THEODORE R	U
HENDERSON,RAMON ADAIR	PD
HIGH,RALPH LESLIE	OBG
HINCHMAN,JEAN FRANCIS	FP
HOFER,DARRELL R	FP
HOLLINGSWORTH,THOS H	FP
HOLMES,JOHN LOUIS	ORS
HUNSBERGER,DONALD WAYNE	FP
HURLEY,JOHN RAWLINS	FP
IMHOF,JOS D	OR
INGRAM,RICHARD GENE	FP
JAY,ARTHUR CARL	PTH
JEFFERIS,KENNETH R	GS
KALKER,MORTON	AN
KAMMER,GRACE E CLEM	IM
KIRSHMAN,FORREST EARL	FP
KO,RICHARD CHOON BONG	FP
KOCH,EDWIN FERDINAND	R
KOSS,KENNETH WM	FP
KRESS,JAMES WALTER	GS
KROH,CASEY	IM
LAWSON,LAWRENCE JOS	GS
LAWTON,DENNIS FREDERICK	FP
LEIPHART,CHAS JOS	R
MC CALLISTER,LARRY LEE	FP
MC CLINTOCK,JAMES A	GS
MC CONNELL,THOS LEE	FP
MC CULLOUGH,JOHN P	
MC DOWELL,FLETCHER W	GS
MC DOWELL,ROBERT W	
MC KAY,MIKE J	
MELINA,CARL MARK	FP
MILLER,STEPHEN ROGERS	US
MONTGOMERY,LALL G	PTH
MONTGOMERY,RALPH F	OBG
MOORE,JACK CONRAD	IM
MORTON,WM MORGAN	IM
MURRAY,PATRICK DAVID	ORS
NELSON,HAROLD E	IM
NEWNAM,PHILIP EDWARD	IM
OSBORNE,JOHN W	GS
OWSLEY,GUY ARGYLE	OTO
PANSZI,JOSE G	N
PARKS,GEO OAKS	FP
PEACOCK,ROBT COWDEN	U
PELL,DONALD MC LAURY	IM
PETERSON,JOHN CHAS	FP
PIPPENGER,JOS IRWIN	FP
POLCZ,GYORGY GYULA	OS
POWERS,PAUL CHAS	GS
PUTERBAUGH,KARL E	FP
QUICK,WM JOS	FP
RADER,MICHAEL R	
RAINS,DANIEL P	FP
REEDY,RICHARD LEE	FP
REILLY,ROBERT NEIL	FP
RITTMEYER,JOHN LOUIS	IM
ROCH,L MARSHALL	OPH
RUDICEL,MAX HURD	FP
SCHULHOF,MAURICE G	GS
SEARIGHT,HOWARD R	OTO
SIMMLER,DONALD W	IM
SNYDER,RICHARD JEROME	OBG
SONGER,JOS MICHAEL	IM
SPECK,CARLSON RAYMOND	R
STANLEY,JOHN ROBT	OBG
STEPHENS,DOYLE LYNN	HEM
STIBBINS,WARREN EDWARD	FP
SULIT,SEVERINO TORRES	GS
SURYANARAYANA,ERAMILLE	
TAYLOR,DONALD ROSS	R
THARP,JOHN D	U
TOMLIN,HUGH MALCOLM	IM
TRIPLETT,DOUGLAS A	HEM
TUASON,RICARDO MAURICIO	GS
URBAN,CRAIG	IM
VLASKAMP,ELAINE MARIE	FP
VOSS,GERT	OBG
WALKER,JACK M	ORS
WARE,HERBERT EARL	FP
WEBB,JOAN LIEBENHEIM	P
WEISNER,RICHARD MEREDITH	FP
WELDY,BRYCE P	OTO
WILLMAN,JOE IRVIN	PTH
WINCE,LELAND LAMAR	PD
WORKMAN,BARBARA E	R
YARLING,JOHN LEWIS	P
YOCUM,MICHAEL WINSTON	A
YOUNG,GERALD STRAUSS	PD

DUBOIS COUNTY MEDICAL SOCIETY

AMINI,SOHRAB	GS
BACKER,HENRY GEO	GP
BEAVEN,JOHN B	ABS
BOMALASKI,MARTIN DONALD	OR
BORGES,VICTOR V J	GS
BROWN,THOS CISEL	R
CRAIG,HARRY LEROY	FP
DAWKINS,PHILLIP ROSS	IM
DREW,DANL CONNOR	FP
ELLISON,JON GREGORY	US
GARTNER,JOSE C	AN
GOOTEE,FRANCIS HUGH	FP
GOOTEE,THOS H	FP
HAKAMI,MOHAMED TAGHI	OBG
HELD,GEO ARTHUR	FP

DUBOIS COUNTY MEDICAL SOCIETY

HIAM,CHARLES GEORGE	FP
KEMKER,BERNARD PERKINS	GS
KLAMER,CHAS H	FP
LEON,MARIO	FP
LUKEMEYER,ST JOHN	FP
MAGBAG,WENCESLAO G	FP
PLOETNER,EDWARD JOS	GS
RAI,SWAROOP	CD
RENDEL,JEFFRY CHAS	EM
SALB,JOHN PAUL	FP
SCALES,ALLEN DEARING	FP
WAGNER,ARTHUR L	FP

ELKHART COUNTY MEDICAL SOCIETY

ARLOOK,THEODORE DAVID	D
ASHTON,ROMNEY WM	DR
ATWOOD,WM HENRY	IM
BARNES,JAMES V	IM
BENSON,JAMES EDMUND	P
BIGLER,FREDERICK W	AN
BILLINGS,ELMER RAY	IM
BLOOM,GEO ROBT	FP
BOLING,RICHARD CLAYTON	OPH
BOWDOIN,GEO EDWARD	GP
BOWERSOX,LE ROY WM	PTH
BOWSER,PHILIP GORTNER	GP
BUDDRUS,DAVID J	PA
CAIN,JEFFREY L	OBG
CAMPBELL,PATRICK B	PD
CASSIM,RECHAD M	PD
CHANDLER,LEON HARVEY	GS
CLARK,JACK PROW	FP
CLASSEN,PETE R C	FP
COLLINS,JOHN B	FP
COMPTON,WALTER AMES	OS
CONKLIN,RAYMOND LE ROY	OM
CORMICAN,HERBERT LEROY	OBG
CRAIG,ROBT ALEXANDER	FP
DE FRIES,JOHN J	FP
DEW,DANL CHING-YEE	GS
DOVEY,EDWARD G	U
DURHAM,THOMAS E	ORS
ECHEVERRIA,R E	ORS
ELLIOTT,THOS A	IM
ELLIS,ROBT KEITH	ORS
FEAR,OLAN DE WITT	IM
FINFROCK,JAMES D	GS
FOSBRINK,EPHRAIM L	FP
FRIESEN,GENE WELDON	ID
FUTTERKNECHT,JAMES OTTO	GS
GATTMAN,G BEACH	PD
GLUCKIN,JAMES ELLIS	OPH
GRABER,ALVIN RAY	FP
GRABER,DONALD D	P
GRABER,VIRGIL R	OBG
GREENLEE,JAMES ROBT	GYN
GREICO,VINCENT MICHAEL	FP
GUNDERSON,SHAUN DENNIS	R
GUTTMAN,JOHN BECK	FP
HANEY,LESLIE EARL	FP
HANNAH,JACK WM	AN
HARRIS,NEIL REVERE	FP
HARTMAN,CLAUDE EDWARD	OBG
HEISER,ERVIN WM	OBG
HIMMELSBACH,WM ANTHONY	OM
HORSWELL,RICHARD GLENN	IM
HURLEY,JAMES W	GE
IVY,JOHN H	IM
JONES,ROBT B	OTO
KENDALL,FOREST MACK	EM
KESIM,MUFIT HUSAM	PD
KINTNER,BURTON E	US
KNIGHT,ERNEST LARRY	END
KOWALSKI,EDGAR P	FP
KRABILL,WILLARD S	PH
KRAUSE,FRIEDRICH	FP
LAMB,FRED KELLEY	N
LUNDT,MILO OLIVER	U
LUTHER,WM C	EM
MARK,GEO ARTHUR	IM
MASSANARI,WALTER S	AN
MC ART,BRUCE A	GS
MEYERS,WM LOUIS	FP
MIDDLETON,RAMONA J	OBG
MILLER,DONALD G	EM
MILLER,GALEN ROBT	GS
MILLER,HUGH A	IM
MILLER,JAMES RALPH	FP
MILLER,SAML T	FP
MINTER,DONALD LEE	FP
MISHKIN,IRVING	FP
MISHKIN,MARVIN ELI	IM
O'DONOVAN,CORNELIUS J	IM
PAFF,WM ALFRED	IM
PAINE,GEO ELSNER	AN
PANCOST,VERNON K	FP
PAPADOPOULOS,A P	ORS
PARSHALL,DALE BRYAN	R
PETERSON,JAMES ARTHUR	PD
PLETCHER,WM DE WITT	IM
PRICE,ROBT WHITCRAFT	P
QUILTY,THOS JAMES	OTO
REED,JAMES CHILTON	D
REEDY,STANLEY GENE	PH
RHEINHEIMER,FLOYD L	FP
ROOSE,LISLE WADE	FP
ROUEN,ROBT LESTER	OPH
RUPE,LLOYD O	GS
SCHEER,ALEXANDER L	OTO
SFREDDO,LOUIS C	
SMUCKER,ERNEST EDWARD	GS
SMUCKER,JON E	GS
SOUTH,DALE R	FP
SPRAY,PAGE EDWARD	FP
STOLTZFUS,GLENN BEECHY	PD
STUBBINS,WM MATTHEWS	GS
SWIHART,DANNY DALE	FP
THOMAS,MICHAEL HOLMES	U
THUT,TIMOTHY D	
TROYER,DANA O	OPH
TROYER,GEO WELDON	OBG
TURNER,JOHN PATRICK	FP
UNZICKER,ROGER GENE	FP
WALTER,LAWRENCE P	
WEYBRIGHT,WM LEE	FP
WILSON,ORLEY EDWARD	FP
WIRTZ,DAVID LEONARD	IM
YODER,C RICHARD	PD
YODER,CARL JESSE	FP
YODER,JONATHAN GLEN	FP
YOUNG,RALPH HUBERT	OM
YUHN,ROBERT B	P
ZEITLER,PHILIP S	ORS
ZIMMERMAN,WM HAROLD	FP

FAYETTE-FRANKLIN CO MED SOC

ANGELES,ARMANDO F	GS
CALDWELL,KENDALL W	R

FAYETTE-FRANKLIN CO MED SOC

DESAI,RAMESH	FP
ELLIS,GEO MELVIN	FP
FAULKNER,BARBARA ELLEN	IM
GUINIGUNDO,NOLI C	FP
HIRSCH,THEODORE	R
KERRIGAN,WM F	AN
LAVALLO,FRANK J	
LOCKHART,JACK MACK	FP
MAZDAI,ABOUZARJOMEHR	GS
MENDOZA,FELICISIMO SUNGA	FP
MOUNTAIN,FRANCIS B	IM
MUFTI,ZAHIR-UL-HAQUE	IM
NEUKAMP,FRANK H	FP
PATEL,KIRIT T	PTH
PETERS,ELMER E	FP
ROSEN,IRWIN CHAS	AN
SANDERS,BERTRAM WEBB	FP
SEAL,PERRY FRANCIS	FP
STEINEM,JOS LINSCOTT	FP
ULGADO,EDMUNDO SILVANO	FP

FLOYD COUNTY MEDICAL SOCIETY

AHMAD,WAHEED	GS
AKIN,DANIEL P	OTO
ALLEN,GEO S	GP
BARBEE,JOHN YOUNG	OPH
BAXTER,SAML MAURICE	OTO
BICKERS,EVERETT EARL	GP
BOHA,MARIA AGNES SZITTYA	GP
BOHA,RUDOLF LASZLO	GP
BOWMAN,LEON WILSON	GP
BROWN,KENNETH HOMER	GP
BRUCKMAN,JOS ALAN	U
BUCHMAN,MARSHALL HARDING	GP
BUNDY,VERNON	GS
CANNON,DANL HUMPHREYS	FP
CONKLIN,JOHN T	P
COOK,MELVIN DUANE	GS
CROFT,WM VAN	FP
FORTNER,WM ROBT	R
GARDNER,RICHARD P	IM
GARNER,WM HOWARD	GS
GARNER,WM HOWARD	GS
GINSHERMAN,ABRAHAM B	FP
HABERMEL,JOHN FRANKLIN	CD
HALLAL,ELI	FP
HARLOWE,STUART E	U
HESS,PAUL PATRICK	PD
HIGGINS,JOHN ROBINSON	GS
HOLLIS,KEVIN G	IM
IRIGOYEN,DAVID ERNEST	P
JOHNSON,WM VERNON	R
JONES,THOS MORRIS	OTO
LA FOLLETTE,ROBT E	FP
MC CULLOUGH,JAMES Y	GS
MC CULLOUGH,JAMES YOUNG	GS
MILLER,ELGAN LEE	OBG
NALE,STEPHEN WAYNE	FP
NEDELKOFF,BOGDAN	PTH
PARIS,JOHN MERRILL	FP
PAYNE,JAMES DAVID	FP
PIERCE,GENE STRATTON	FP
POPE,HOWARD A	FP
RECEVEUR,PAUL E	FP
RECEVEUR,ROBT LEWIS	FP
ROBERTSON,ADDIS NEAT	FP
ROBINSON,NAN ELIZABETH	PD
RUOFF,WM F	IM
SEIPEL,STANLEY F	FP
SHELTON,CLYDE F	PD
SILVA,GUY D	OBG
SONNE,IRVIN H	R
STREEPEY,JEFFERSON I	FP
WEISS,ROBT M	D
WOHLFELD,GERALD M	R
WOLFE,MORTON FRANCIS	FP
WOLFE,NELSON ALBERT	FP
WORLEY,HENRY LEE	OPH
YOUNGS,PAUL EARL	US

FORT WAYNE COUNTY MEDICAL SOC

ACKER,HERBERT KARL JOHN	FP
ADAMS,ELMER W	PD
AESCHLIMAN,DALE	US
AESCHLIMAN,WILLIAM JAMES	FP
AHLBRAND,ROLAND CARL	OS
AHUJA,SHASHI KANT	IM
AIKEN,ARTHUR FRANK	GP
AIKEN,NEVIN E	GPM
ALBRIGHT,JAMES E	ORS
ALDRED,ALLEN W	PTH
AMIN,YOGESCHANDRA M	IM
ANDERSON,ERNEST	GP
ANDERSON,GARLAND D	FP
ANDREW,JERALD LEE	FP
ARATA,JAMES ANDREW	R
ARATA,JUSTIN E	GS
ARMBUSTER,THOMAS G	R
ASHMAN,WM CARL	PD
AUST,CHAS HERSHAL	GP
BAHR,ROBT ERNEST	GP
BAILEY,PAUL PRESTON	U
BALL,J ROBT	GS
BALL,MARGARET J HITZEMAN	HEM
BALTES,JOS H	GP
BARCH,JOHN W	OM
BASH,STEPHEN ESTAL	PD
BASH,WALLACE EUGENE	PD
BAUMAN,RICHARD LEE	R
BAYAZIT,LUTFI Y	GP
BEAMS,RALPH H CURIE	OPH
BECKER,LOWELL ERVIN	CHP
BEIERLEIN,KARL M	OBG
BEIGHTS,RAYMOND SAML	GP
BELANGER,ROBT ALLEN	FP
BELSHAW,JAMES W	GP
BERGHOFF,JAMES RAYMOND	OM
BEUTLER,THEODORE V	U
BIERMAN,GILBERT HENRY	ORS
BILLINGSLEY,JOHN SMITH	R
BIXLER,JAMES AMOS	OPH
BLICHERT,PETER A	OBG
BOLANDER,JAMES EDWIN	GP
BOLLHEIMER,DON ALLEN	OPH
BOWER,RICHARD ELRIE	GP
BOWERS,GEO W	U
BOWERS,JESSE W	GS
BRADENBERGER,E JON	FP
BRANDT,WM E	GS
BRAUNLIN,ROBT JUSTICE	OTO
BRIDGE,THOS ARTHUR	FP
BRIDGES,WM L	R
BROMLEY,LUMAN W	ORS
BROSIUS,ROBT HENRY WM	GP
BROWN,GARLAND RICHARD	R
BRUCKER,PERRY ALBERT	PS
BRYAN,FRANKLIN ABRAM	OS
BUCHHOLZ,JAMES G	ORS
BUCKNER,GEO DOSTER	GS
CAST,WILLIAM RONALD	OTO

FORT WAYNE COUNTY MEDICAL SOC

CASTOR,KENNETH C	PD
CHAMBERS,ALAN R	US
CHAMBERS,DONALD CALVERT	OM
CHASE,JAMES ALLAN	OM
CHRISTEN,SAMUEL ELLIS	OPH
CLARK,WM RUSSELL	IM
CLARK,WM RUSSELL	FP
COATS,STEPHEN E	OBG
COCHRAN,HARRY ADAM	OS
COLE,STEPHEN LEROY	FP
CONLEY,JOHN ELLIS	FP
CONNELLY,JERRY HUBBARD	FP
CONNELLY,RICHARD DONALD	FP
CONNER,ROBT ALLISON	R
COONEY,CHAS JOHN	U
COOPER,B TRENT	FP
COOPERMAN,ALAN S	DR
COTTRELL,ROBT FRANKLIN	AN
COUCH,WILLIAM H	ORS
COWAN,JOHN THOS	OBG
CRAIG,RICHARD MORTON	R
CRAWFORD,JOHN N	R
CSICSKO,JOHN FRANCIS	TS
CUFF,STEVE COLLEY	R
CULP,JOHN EWART	DIA
CUMMINS,LARRY EDWARD	CHP
CURRIE,ROBT WM	DR
DAHLING,FRED WALDEMAR	FP
DATZMAN,RICHARD C	DR
DAUGHERTY,H SAYLER	OTO
DAUSCHER,DEAN DONALD	FP
DECKER,JEFFRY R	D
DETTMER,ROBT WAYNE	NEP
DILLON,GARY P	D
DONESA,ANTONIO BRAGANZA	NS
DORMIRE,ROBT DARRELL	R
DUNSTONE,HARRY CARTER	P
DYER,JOHN KELLY	NEP
EASTLUND,MARVIN EUGENE	OBG
ELSTON,LYNN WICKWIRE	GS
ELSTON,RALPH WICKWIRE	GS
EPPS,JAMES HARMAN	AN
FELGER,THOS ALLEN	FP
FERGUSON,ARTHUR N	CD
FIACABLE,JOS PAUL	P
FLAHERTY,ROBT ANTHONY	R
FOSTER,JOHN ARTHUR	PTH
FOUTS,JOHN B	IM
FOX,RICHARD FREDERICK	TR
FOY,THOS DANL	FP
FRANKE,GORDON RAYMOND	FP
FRANKHOUSER,CHAS M A	PTH
FULLAM,RICHARD G	AN
FURTADO,ROBT	PS
GALLAGHER,DANL F	AN
GANGADHAR,RUDRAPPA	HEM
GARTON,HARRY WASSON	US
GASTINEAU,DAVID C	TR
GENTILE,JONATHAN PAUL	GS
GERDING,WM JOHN	FP
GIESTING,JEROME RICHARD	US
GIFFIN,CHAS SALEN	OTO
GILBERT,ALAN RUSS	D
GIZE,RAYMOND WALTER	DR
GLASSLEY,STEPHEN HERBERT	FP
GLOCK,MAURICE E	IM
GLOCK,STEVEN R	ORS
GODSEY,PHILLIP D	R
GOEBEL,C WM	PDA
GOULD,JOHN C C	GYN
GRAHAM,GEO M	OM
GRAHAM,JAMES CLARENCE	FP
GREEN,ROBT F	P
GREENLEE,ROBT L	CHP
GRIEST,WALTER DIXON	PTH
GRIFFITH,HAROLD RILEY	R
GUEBARD,BRUCE ALLAN	FP
GUMBERT,JACK LEE	GS
HACKETT,WALTER GEO	FP
HALABY,FOUAD ASSAD	R
HALEY,ALVIN JOHN	FP
HALL,WM RICHARD	AN
HALLER,RICHARD CARL	N
HAMILTON,EMORY D	AN
HAMILTON,GEO MILTON	IM
HANSELL,CHAS EARL	FP
HARLESS,O FRED	EM
HARRIS,JAMES JAY	FP
HARRIS,LEE A	OBG
HARSHMAN,LOUIS POTTER	P
HARVEY,HARRY C	OS
HASEWINKLE,AUGUST M	IM
HASTINGS,WARREN C	NS
HATTENDORF,A PAUL	PH
HAVENS,RUSSELL E	AN
HAWK,JAMES ALLEN	FP
HAYHURST,THOS ELDON	PUD
HECKMAN,JAMES D	N
HERENDEEN,THOS LEE	GS
HERSHBERGER,PHILIP G	ORS
HICKMAN,DONALD M	FP
HICKS,THOS JOS	R
HILL,JAMES STEPHEN	PD
HILLERY,ROBT LEE	FP
HOETZER,ELDORE MARTIN	FP
HOFFMAN,ARTHUR F	AN
HOOG,JOHN MICHAEL	U
HOOVER,JOSEPH ROYAL	FP
HULL,DE WAYNE L	PS
HUMPHREYS,JOHN LESLIE	OS
IRMSCHER,GEO W	GS
IRMSCHER,JANE MC MULLEN	PD
ISENBERG,MICHAEL T	GE
ISENOGLE,KENNETH F	OTO
JACKSON,JAMES WOODROW	CD
JACKSON,JOHN F	AN
JANSCH,MARJORIE E DUPONT	PD
JANSCH,THEODORE LEO	PTH
JENSEN,ROBT EUGENE	OTO
JOHNSON,PHILIP JAMES	FP
JOHNSTON,RICHARD M	AN
JONTZ,JOE GORDON	GS
JONTZ,RICHARD LEE	R
JOSLIN,GEO DAVID	P
JUERGENS,RICHARD BOWMAN	FP
JURGENSEN,WALTER T	FP
KACHMANN,RUDOLF	NS
KAMMEYER,WM ALLEN	FP
KAPLAN,MARTIN JEROME	GE
KAROL,HERBERT JAY	U
KAUFMAN,JULIAN ROWE	A
KECK,CARLETON ALLEN	OPH
KEMPLER,NORMAN ALAN	OPH
KENT,RICHARD NELSON	IM
KEYES,ROBT C	PD
KILGORE,BYRON W	P
KIMBROUGH,ROBERT F	ORS
KLEIFGEN,WM A	FP
KLEOPFER,RONALD G	ORS
KLOOZE,KENNETH WARD	FP
KNIGHT,LEWIS W	OBG
KRUEGER,JOHN EUGENE	FP

FORT WAYNE COUNTY MEDICAL SOC

LA SALLE,WILLIAM B	ORS
LADIG,DONALD STEES	FP
LAKER,GENE CARROLL	FP
LAKER,RICHARD JOHN	FP
LAMPE,ELFRED H	OBG
LARMORE,ROBERT HUGHEL	OPH
LENK,GEO GUSTAVE	OM
LENTZ,WM CHAS	D
LLOYD,ROBT PAUL	GS
LOGAN,RICHARD S	D
LOHMAN,ROBT M	FP
LOVE,VINCENT LOGAN	OM
LUCAS,JOHN THOMAS	CLP
LUCKEY,JAMES EDWARD	AN
LUDWIG,JEROME J	U
LYON,WM COCHRAN	P
MACKEL,DAVID F	ORS
MACKEL,FREDERICK O	ORS
MACKEL,JERRY L	ORS
MALDIA,GODOFREDO MAYUGA	ON
MANN,RICHARD EUGENE	P
MANNING,GEO C	NS
MARTIN,JOHN PHILLIP	AN
MASTRANGELO,MICHAEL J	GS
MC AFEE,GEO JOS	CHP
MC ARDLE,MICHAEL L	ORS
MC CALLISTER,JOHN WM	GS
MC CASLIN,DAN LESTER	R
MC DOWELL,GEO ARNOLD	FP
MC EACHERN,CECIL G	GS
MC MURRAY,STEPHEN D	IM
MENSCH,JAMES R	AN
MERCER,SAML R	D
MEYER,HERMAN ARTHUR	FP
MEYER,STEVEN C	IM
MEYER,THEODORE OBED	OPH
MILLER,DON EUGENE	IM
MILLER,EDWARD DWAYNE	OPH
MILLER,J THOS	R
MILLER,KENNETH DEVON	EM
MILLER,ORVAL JEROME	FP
MILLER,RICHARD HENRY	GS
MILLER,ROBT BENJ	OTO
MILLER,WAYNE STARR	GS
MILLER,WM JACOB	IM
MINICK,LINUS J	FP
MOATS,CARL FRANKLIN	FP
MOELLER,VICTOR C	FP
MOHRMAN,JOHN STEVEN	FP
MOHRMAN,MICHAEL S	FP
MONTGOMERY,CHARLES E	ORS
MOREY,EDWIN E	OBG
MORGAN,MILTON MELVIN	GS
MORTENSON,LELAND JAMES	FP
MUELLER,LAWRENCE W	OPH
MUHLER,JOSEPH CHARLES	FP
MUNOZ,JOSE CUI	PD
MUSGRAVE,JOHN MICHAEL	CRS
MUSSELMAN,ROBT H	FP
NELSON,JAMES BERT	A
NILL,JOHN HENRY	FP
NOLAN,GERALD ROBT	FP
O'BRIAN,JOHN FRANCIS	FP
O'ROURKE,CARROLL	OPH
OSOS,NANCY ANN	FP
OTTINGER,C JOE	N
PAFLAS,DANL LA MAR	OTO
PAINTER,DONALD SCOTT	OBG
PAN,CHAS CHIEH-MING	PTH
PANCNER,RONALD JERRY	P
PARENT,J REX	OPH
PASALICH,JOHN NOVAK	R
PATEL,ARVINDKUMAR K	IM
PATTERSON,JACK WALTER	GS
PEARSON,HUEY LAWRENCE	FP
PEPPLE,WALTER DAVID	FP
PERRIN,KERMIT FLOYD	FP
PICKETT,MERLE ELMER	AN
PORTER,DAVID H	
POWELL,MELVIN JACK	R
PRIDDY,MARVIN EUGENE	FP
RAMAPRAKASH,H N	OBG
RANK,WM BENJ	U
RAUSCH,JAMES M	R
REED,JOHN DAVID	IM
RESZEL,PAUL A	ORS
RHEE,SANG KEE	AN
RICHARDS,ALAN DANL	EM
RICHARDSON,JOS HILL	IM
RISSING,WALTER JOS	CRS
ROMAIN,LOUIS FRANK	N
ROSS,STEVEN EDWARD	FP
ROTHMAN,PETER MITCHELL	PDA
ROUSSEAU,JOHN WM	OBG
RUSHER,MERRILL W	GYN
SAFIRSTEIN-ROSZERMAN,M	AN
SAHLMANN,HANS	FP
SALON,HARRY W	FP
SALON,JOEL WARREN	IM
SCHAAB,ERIC	PD
SCHEERINGA,RONALD HENRY	IM
SCHLADEMAN,KARL R	PTH
SCHLEINKOFER,ROBT MELVIN	FP
SCHLOSS,ROBT PHILIP	FP
SCHLUETER,DAVID PAUL	U
SCHMIDT,EUGENE EDWARD	AN
SCHMOLL,ROBT J	OPH
SCHNEIDER,LOUIS A	PTH
SCHOENHALS,CHAS ERB	GS
SCHROEDER,STEPHEN BLAIN	NS
SCHUBERT,JEROME C	FP
SCHUBERT,PHILIP CHANDLER	FP
SCHWARTZBERG,STUART G	CDS
SCOTT,H VAUGHN	PD
SCUDDER,JAMES PETERSON	U
SENSENY,EUGENE F	CRS
SHAH,PRIYA	IM
SHEALY,THOS ALLEN	OPH
SHEELER,GARY LEE	FP
SHINABERY,LAWERENCE	FP
SHRINER,PHILIP OWEN	U
SHUGART,ROBERT R	ORS
SIDEL,ALAN WAYNE	FP
SIDELL,JAMES PAUL	FP
SILVERO,HUBERT L	FP
SIRLIN,EDWARD MARTIN	PD
SMITH,CLIFFORD CURTIS	FP
SMITH,JOHN PAUL	FP
SMITH,PHILIP LE ROY	OBG
SMITH,ROGER CARLTON	IM
SMITH,THOMAS D	
SNYDERMAN,SANFORD CHAS	OTO
SORG,DAVID ARTHUR	END
SOUDER,MARK S	FP
SPENCER,C HERBERT	AN
STAFFORD,TOM MICHAEL	OBG
STANFORD,JOHN R	TS
STANLEY,ROBT GOULD	FP
STAUFFER,RICHARD C	ORS
STEIGMEYER,DAVID J	PD
STIER,PAUL LOUIS	IM
STOVALL,ALFRED	FP
STUCKY,JERRY LUCAS	FP

FORT WAYNE COUNTY MEDICAL SOC

STUCKY,MITCHELL BOWMAN	FP
STUMPF,EDWIN E	FP
SUGARMAN,DONALD RAYMOND	R
SULLIVAN,ROBT E	GS
SWEARINGEN,ALFRED G	R
SWINT,ROBERT E	IM
TAN,MANUEL L	AN
TATE,THOS DALE	FP
TAYLOR,ROBT GEO	RHU
TENNANT,DAVID LEWIS	OM
TERRILL,RICHARD W	OPH
THOMAS,JOHN ROBT	OTO
THOMPSON,SAML RICHARD	OPH
THONG,SIONG-HOAT	AN
TIELKER,RICHARD ELMER	FP
TOMUSK,AUGUST	CDS
TOWLES,JEFF HERMAN	GS
TRIER,HERBERT PAUL	P
TRITCH,DAN LEE	FP
TUNNELL,HARRY DANL	GS
TYNDALL,JOHN PHILLIP	OBG
UNGEMACH,WILLO FREDERICK	IM
VILLANUEVA,ONOFRE Q	PD
VOGEL,LLOYD ALBERT	EM
VOORHEES,ROBT JOHN	GS
WALKER,FLOYD BROWN	FP
WALLACE,COLLINS ROBT	AN
WALLACE,JOHN MANIFOLD	FP
WARD,GERALD FREMONT	U
WARFIELD,CHESTER H	R
WARR,ARTHUR CLIVE	ORS
WARRENER,GERALD G	
WATSON,JAMES RITZ	FP
WICK,ALFRED ALBERT	OPH
WIERZALIS,EDWARD F	FP
WILLIAMS,A BERNIECE M	FP
WILLIS,ROBT L	R
WILSON,ROLAND BYARD	FP
ZURCHER,BRIAN DALE	FP
ZWEIG,ELMER S	FP

FOUNTAIN-WARREN CO MED SOCIETY

BRENNER,HUGO ANTONIO	GS
FURR,JACK DEAN	FP
HOFFMAN,MAX NORMAN	FP
NELSON,CARL ALBERT	FP
PERSON,THEODORE C	FP
PETRICH,PETER RICHARD	FP
RINGER,WM ALFRED	FP
RUSK,HUBERT MORGAN	FP
SALVO,ATEE SEVILLA	AN
STEPHENS,LOWELL R	FP
SUZUKI,TSUTOMU TOM	FP

FULTON COUNTY MEDICAL SOCIETY

ALUNING,PASTOR DAVID	GS
DEL ROSARIO,PEDRO G	FP
HERRICK,CHAS LISLE	FP
HESS,PAUL JOEL	FP
HOFF,KENNETH EUGENE	US
KNOCHEL,WAYNE LEE	FP
KRANING,KENNETH KLAIRE	FP
RAMOS,JAIME GUTIERREZ	FP
RICHARDSON,JOS DOWNS	FP
SCHALLIOL,JAMES PAUL	P

GIBSON COUNTY MEDICAL SOCIETY

DYE,WM EDWARD	FP
GRAVES,ORVILLE M	FP
MARCHAND,EDWIN VICTOR	FP
MC CARTY,VIRGIL	US
MC ELROY,ROBT SAML	ABS
PECK,JAMES FRANK	FP
PETITJEAN,HAROLD GEO	FP
PRUITT,DON E	R
RAYES,JOS LUKE HASSAN	GS
WEITZEL,ROLAND E	FP
WELLS,WM RUSSELL	FP

GRANT COUNTY MEDICAL SOCIETY

ABELL,CHAS FREDERICK	ORS
AYRES,WENDELL WILLARD	GS
BALL,G MICHAEL	OBG
BASKETT,RUSSELL J	GP
BEAN,WM JOS	D
BECK,THOS ALFRED	GP
BELCHER,ALAN DEVON	R
BLOOM,A WARD	PH
BOTKIN,JAMES EDWARD	FP
BOURKE,WM W	P
BOYER,GRACE BESHGETOOR	OBG
BRANDES,DAVID CHAS	U
BROWN,ROBT MC DOWELL	GP
CAMARATA,JAMES CHAS	DR
COMEAU,WM JOS	R
CUNNINGHAM,ROBT DANA	IM
DAVIS,JOS BENJ	GS
DONALDSON,MILES WARREN	FP
FAUSTINO,CARLOS DAET	AN
FAUSTINO,JOSEFINA F R	OBG
FISHER,HENRY	FP
FISHER,PIERRE JAMES	GS
GANZ,MAX	FP
GARGETT,JAMES MICHAEL	FP
GARRISON,LEON JOHN	FP
GLOCK,DOUGLAS E	ORS
GOLDBURG,BURT RICHARD	OTO
GOLDSMITH,DAVID A	IM
GRANT,M ARTHUR	AN
GUEVARA,FRENITA BERNAL	FP
GUEVARA,TEODORO G	IM
HEMPHILL,ROGER ANDREW	IM
HUMMEL,RUSSEL MILLER	FP
JACKSON,ROBT FRANKLIN	GS
JARRETT,JOHN CROW	OBG
JESCH,DORIS ANN	PD
JOSHI,PRAKASH NARAYAN	IM
KENNEDY,JOHN WAYNE	EM
KERSHNER,CHARLES R	ORS
KHALOUF,HERBERT CHAS	GS
KHALOUF,SHIRLEY THOMPSON	PM
KOONTZ,WM ALFRED	FP
LONG,MAX RICHARD	FP
MAGNO,JOSE NOCUM	P
MALOTT,FREDRICK R	FP
MANALO,FRANCISCO SARENAS	AN
MUSSELMAN,LAURENCE K	P
PATEL,RAMESHCHANDRA I	PD
PATTISON,JOHN DAVID	IM
PEARCY,MARCENE	U
POWELL,JAMES PAXTON	GS
RAJU,GOPAL S	GS
RECOMETA,OSCAR DURAN	OBG
REID,JAMES DONALD	OPH
RHAMY,ARTHUR P	U
RHAMY,DONALD EUGENE	U

GRANT COUNTY MEDICAL SOCIETY

RHORER,JOHN GILBERT	FP
RIFNER,EUGENE SYMONS	FP
ROE,DAVID G	
SHAH,AJIT	OBG
SHEPARD,WILLIAM D	
SHOEMAKER,RICHARD L	FP
SHROCK,ETHAN ELLSWORTH	FP
SHUCK,WILLIAM ARTHUR	GS
SIMMONS,FREDERICK H	OTO
SMITH,BARTON TAYLOR	OBG
SMITH,EVRETT FRANK E	R
SMYRNIOTIS,FOTIOS E	GE
SNOWHITE,ARTHUR B	OPH
SOE,MINN	AN
STEWART,JOHN CHAS	P
TAYLOR,EVERETT CHAS	FP
THOMPSON,BURTIS J	PTH
TIRUCHELVAM,ROHAN L M	AN
URGENA,REGINO B	AN
VESEY,WM JOS	OTO
VINLUAN,TEOFILO S	IM
WALTON,RICHMOND L	PD
WARREN,CARROLL B	OBG
WILSON,NED ARLAN	PD
WOJCIK,LADISLAS D	PD
YALE,CHAS A	EM

GREENE COUNTY MEDICAL SOCIETY

ALANA,FORTUNATO C	P
BAILEY,THOS EDWIN	GS
BROSHEARS,KENNETH P	GP
GRAF,JEROME ALEXANDER	AN
HO,GLORIA R	PD
HO,TERRY J	OBG
JOCSON,CATALINO T	FP
LARDIZABAL,JOSE MARQUEZ	FP
MOSES,ROBT EARL	FP
MOUNT,MATHIAS SAML	FP
PORTER,CARL MORGAN	FP
POWERS,WM RAY	FP
RANEY,BEN BUTLER	AN
ROTMAN,HARRY GENE	US
ROTMAN,SAM ISSAC	FP
SWAEBY,RONALD L	FP
TOMAK,MILTON EDWARD	FP
TRAN,LAU	FP
WONER,JOHN WM	FP

HAMILTON COUNTY MEDICAL SOC

AMBROSE,JESSE CLEMENTS	GP
AYERS,MARION EDWARD	AN
BILODEAU,RICHARD GERARD	DR
BLACKBURN,HOWARD R	R
CARTER,EUNICE M MAIER	PD
DWYER,DAVID JAMES	IM
FRIEDMAN,SHELDON JAMES	IM
HASH,JOHN SHORE	GS
HAYWOOD,JOHN GERRY	FP
KENNEDY,MICHAEL WM	GS
LANNING,ROSCOE A	FP
LLOYD,JOE REID	US
MABEL,THOS ARTHUR	FP
MANHART,DOYLE BASLER	FP
MYERS,JERRY RICHARD	OPH
NEWBY,H EUGENE	FP
REED,JAY ALLEN	FP
SAPERSTEIN,MORRIS	CHP
SHANKS,RAY W	FP
SWINDELL,SUSAN L	PD
THOMAS,W CLAYTON	FP
VAN SCOYC,JON DARA	FP
WAITT,PAUL MARION	GS
WARREN,JOHN ROBT	EM

HANCOCK COUNTY MEDICAL SOCIETY

ANDERSON,JAMES TWYFORD	FP
ARIVE,FLORO FERNANDO	GP
BEESON,WILBUR P	FP
CLEMENTS,ROBERT E	EM
ENDICOTT,WAYNE H	FP
FARRELL,JOHN JOS	AN
GARRISON,JAMES L	FP
HAAS,RAY ALLAN	FP
HENN,RAY ANTHONY	FP
HENSLEY,HARRY THOS	FP
HUNTER,DONN R	FP
KIRBY,TED C	FP
KUHN,ROBT WOODROW	FP
MATLOCK,CARL KENT	FP
MILLER,JOS A	FP
MOENNING,JOHN EDWARD	GS
PAREJA,FRANCISCO S	FP
PHILLIPS,RICHARD JAMES LEE	GS
REA,RALPH LEWIS	FP
REED,DONALD WAITE	P
RHYNEARSON,HAL ROBT	FP
RHYNEARSON,WM ROBT	FP
SERVIES,HERSCHELL	R
SHARP,GARY CHAS	FP
SINGCO,BIENVENIDO O	FP
SMITH,JOHN HAROLD	AN

HARRISON-CRAWFORD CO MED SOC

BLESSINGER,LOUIS HENRY	GP
BROCKMAN,WILFRED J	GP
DILLMAN,CARL EDWARD	FP
DUKES,DAVID J	FP
ISLAM,RASHIDUL	GS
MAY,RICHARD MILTON	FP
ROBERTS,THOMAS K	FP

HENDRICKS COUNTY MEDICAL SOC

ARUTA,EFREN V	R
BAKER,GLENN WILBUR	FP
BLACK,M JAMES	GP
CALHOON,JOHN PAUL	R
CLARK,ERIC DANL	FP
DUNCAN,WM ARBAUGH	OBG
EDWARDS,WILLIAM A	FP
ELLIS,LYMAN HALL	FP
GIBBS,JOS WARREN	FP
HADLEY,DAVID M	FP
HAGGARD,DAVID BENSON	FP
HEINLEIN,CARL LORISTON	FP
HIBBELN,THOS J	GS
IRWIN,RICHARD STEPHEN	FP
KERLIN,JOS C	FP
KIRTLEY,ROBT WAYNE	FP
LONG,MALCOLM DARRELL	R
LOVALL,LARRY D	FP
MC CLURE,MORRIS E	

HENDRICKS COUNTY MEDICAL SOC

MC DOUGAL,ROBT A	PTH
MITMAN,URSULA E	OR
NEELY,MICHAEL L	FP
OCHSNER,EDWARD C	OR
SCAMAHORN,JAMES OSCAR	FP
SCAMAHORN,MALCOLM O	FP
SCUDDER,ARTHUR NELSON	FP
STAFFORD,WM CLAYTON	IM
STEGEMOLLER,RONALD	FP
TAYLOR,ROBT LEONARD	GS
TERRY,LLOYD SHERMAN	FP
WAGNER,WM LESLIE	US
WALKER,THOS MARTIN	FP

HENRY COUNTY MEDICAL SOCIETY

BLEDSOE,JAMES GLEN	GP
BOWERS,LYNN A	PD
BURNETT,ARTHUR BAKER	OPH
CAIN,DAVID ROBINSON	FP
DOYLE,MARK G	EM
DYE,CLOYD LEROY	IM
EASTER,JAMES NEIL	FP
EGGERT,DAVID E	GS
FIELDS,RANDALL W	R
FISHER,JOHN EDWARD	
FOSTER,RICHARD	IM
GATMAITAN,ALEJANDRO V	FP
GOULD,ROBERT E	PD
GRANT,PHYLLIS ANN FENN	FP
HEILMAN,WM CLYDE	FP
HILL,KENNETH GRIMES	FP
KINKADE,PAUL TERRENCE	GS
LENTINI,NINO RUDOLPH	ORS
LIFE,HOMER LAWRENCE	GS
MAY,A J	FP
MC ALLISTER,ALLAN J	US
MC DONALD,FRANK C	FP
MC KEE,ROY G	FP
MILLER,WM AMON	FP
MOREC,GEO JAMES	PD
PAZ,LUIS AUGUSTO	U
POLLACK,SEYMOUR LESTER	N
ROBERTSON,WM SIMON	OS
SALAS,C DAVID	OPH
STEUSSY,CALVIN N	PTH
STRICKER,PAUL JAMES	FP
VALENA,DOMINADOR V	AN
VIVIAN,DONALD E	OR
WEBB,ORVILLE LYNN	FP
WIATT,LEONARD H	EM
WILHELM,GUIDO PAUL	OBG

HOWARD COUNTY MEDICAL SOCIETY

ADLER,ALAN JAY	GP
ARTIS,MYRLE EVERETT	GP
BENNETT,BENJ DOUGLAS	GP
BLUE,EARL ROBT	R
BOWERS,COPELAND C	GP
BOWERS,JOHN ALDEN	OPH
BOWMAN,JOHN ALDEN	P
BRADLEY,RICHARD VINCENT	GP
BROWN,RICHARD J	U
BRUEGGE,THEODORE JOS	OM
CHOI,STEPHEN S	ORS
CLEVINGER,WM GERALD	PTH
CONLEY,THOS MARION	OBG
CRAIG,REUBEN ALLEN	PD
CRAWFORD,THEODORE R	EM
CREBO,ALAN R	OPH
DAS,AMAL KUMAR	FP
DAVID,DELFIN PARAS	EM
DENTON,LARKIN D	EM
DOSS,JEROME FAULKNER	OBG
EARL,MAX MARKLEY	IM
ELLEMAN,JOHN HENRY	FP
ERICSON,HOMER STANLEY	FP
FIELDS,DONALD LEE	PD
FRAZIER,JOHN LEE	IM
FRETZ,RICHARD CARL	FP
GABOYA,RUBEN READ	IM
GOHIL,JIVANLAL	P
GOLPER,MARVIN NORMAN	R
GOOD,RICHARD PETERSON	OTO
GRANDA,ARMANDO BERNARDO	AN
GROTHOUSE,CARL B	ORS
GUIN,JERE DONALD	D
HALFAST,RICHARD W	ORS
HIGGINS,JACK WAYNE	FP
JEWELL,GEO MONROE	A
KENNEDY,DAVID B	P
KING,FRANK KARL	EM
KING,NINA CLEVINGER	IM
KREMERS,GEO ADAM	U
LODDE,MARVIN BERNARD	AN
LONGSHORE,ROBT EUGENE	AN
MAUS,RONALD TRENT	FP
MC CLURE,WARREN N	FP
MENDELSON,STANLEY M	FP
MICHAEL,ROBT L	GS
MIETHKE,RICHARD PAUL	OM
MOORE,JOHN MANSFIELD	OBG
MURRAY,ERNEST C	IM
PAFF,JAMES RICHARD	HEM
PARIS,DURWARD WHITEMAN	IM
PERKINS,POWELL LEON	GS
PESARILLO,SERVANDO N	FP
PHARES,ROBT WESLEY	AN
POHNERT,WILLIAM H	ORS
PRATHER,PHILIP E	FP
QUAKENBUSH,JOHN PHILLIP	FP
RADPOUR,SHOKRI	OTO
REUL,GEO MARVIN	FP
ROEGNER,DONALD LEE	CHP
RUDICEL,MAX W	PTH
SCHERSCHEL,THOS ROGER	GS
SCOTT,PETER L	OR
SEKULICH,MILO M	R
SENN,RICHARD THOS	U
SMITH,CHAS FELPS	R
SPANGLER,JESSE SAML	GS
TAPNIO,ROGELIO ORDONEZ	GE
TATE,JAMES ALAN	PD
TIGNOR,STERLING PRESTON	GS
TRIMBLE,JOHN G	OPH
VAN DENBARK,HOWARD M	OBG
WACHOB,TOM W	OBG
WATSON,LEO GENE	OPH
WESTERFIELD,GORDON LEE	FP
WHITFIELD,JAMES E	FP
WHITLOCK,COLEMAN M	FP
WILSON,NORMAN KEITH	FP
ZENT,DON PAUL	FP

HUNTINGTON COUNTY MEDICAL SOC

BLAIR,RICHARD GEO	GP
BRUBAKER,HAROLD S	AN
CASEY,STANLEY MC CLURE	FP
CLUNIE,WM ADAMS	OPH

HUNTINGTON COUNTY MEDICAL SOC

COPE,STANTON ELIJAH	AN
DOERMANN,PAUL E	GS
EREHART,MARK GEO	OPH
EVISTON,JOHN BOYD	FP
JAMES,THOS	GS
KAY,JOHN BOYD	FP
KIRSTEN,WALTER T	AN
KRUEGER,BARBARA J JACOBS	R
LARSON,ARTHUR NORMAN	GS
MARKS,HOWARD HARLEY	FP
MATHEW,PALLIPEEDIKAIL C	FP
MEISER,ROBT DEWITT	OPH
PEARE,REEVE BURTON	FP
SHAH,KISHORI P	OBG
SHAH,PIYUSH J	PD
SMITH,KENNETH ALLEN	IM
WAGNER,RICHARD W	FP
WEBB,WILLIAM J	FP
WHEELER,BARTH EDMONSON	FP

MARION COUNTY MEDICAL SOCIETY

ADDLEMAN,ROBT H	AN
AHEARN,DANL JOS	NEP
AHUJA,GIRDHAR LAL	PD
ALBERTSON,FRANK P	GP
ALBRECHT,WILLARD HAROLD	AN
ALEXANDER,JEFFREY LYNN	PD
ALIG,HOWARD MARION	OPH
ALIG,VINCENT BOONE	P
ALL,BARBARA ANN BEDWELL	AN
ALLEN,ROBT KIRBY	OM
ALLEY,THOS WM	NEP
ALVIS,DAVID LEE	OPH
ALVIS,EDMOND OCHS	OPH
ANDERSON,JOHN T	OS
ANSHUTZ,WM M	R
ANTREASIAN,BERJ	IM
APPEL,RICHARD HARDY	EM
APPLEGATE,GEORGE WILLIAM	NEP
ARBOGAST,JOHN L	GER
ARBUCKLE,RUSSELL LOWELL	GP
ARMER,ROBT M	PD
ARMSTEAD,JOHN WM	OBG
ARNOLD,AARON LEON	GP
ARNOLD,ANTHONY	ORS
ARNOLD,ROBERT DALE	OBG
ARONOFF,MICHAEL STEPHEN	GP
ASHER,JAMES WILDING	GP
ASSUE,CLARE MELBA	P
ATHAR,SHAHID	END
ATKINS,CLAYTON HUGH	GP
ATKINS,STEVEN DALE	GP
ATZ,WILLIAM A	ORS
AULL,EDWARD BERNARD	PD
AVERY,GEO O	GP
AYERS,JOHNNIE	FP
BAADJ,ABDEL GHANI	GS
BACHMANN,ARNOLD J	OBG
BADER,JOS	OS
BAIRD,MELVIN SCOTT	GP
BAKER,JOHN C	OS
BALCH,JAMES FERGUSON	U
BALL,JOS EMORY	GP
BALLANTINE,THOS VAN NESS	GS
BAO,DANNY C D	
BARNES,GILBERT HARVEY	FP
BARTLEY,MAX DONALD	OPH
BASH,DAVID L	GE
BASTNAGEL,WM FRANCIS	IM
BATCHELDER,JOHN ERNEST	CD
BATE,MOSTAFA HASHEM	GS
BATES,LAURENCE HOWARD	IM
BATTERSBY,JAMES S	TS
BATTIES,PAUL TERRY	IM
BAUER,THOS BRYANT	PS
BAUMEISTER,HERBERT E	AN
BEACH,ROBT RUSSEL	OS
BEAMS,RONALD NED	OPH
BEATTY,BRUCE EUGENE	US
BEAVER,HOWARD WILSON	GP
BEAVER,WALTER PHIL	FP
BECHTOL,LAVON DEE	PA
BECK,EVART MALCOLM	IM
BECKER,HARRY GREGORY	GS
BEELER,JOHN WATSON	R
BEERING,STEVEN CLAUS	IM
BEESON,WILLIAM H	GS
BELSHAW,GEO HENRY	OBG
BELT,JAMES H	PD
BELTZ,HOMER F	US
BENDER,BRUCE HAROLD	IM
BENEDICT,PAUL FRANCIS	GS
BENNETT,IVAN FRANK	P
BENNETT,JAMES E	PS
BENNETT,WM SHERMAN	AN
BENSON,JESSE THOS	OBG
BENTZ,EDWARD WAYNE	AN
BENZ,JAMES ALBERT	FOP
BERMAN,EDWARD J	PDS
BERRY,MARGARET	IM
BHAGWANDIN,HARRY OMROA	GP
BIBLER,LESTER DAVID	FP
BIEGEL,ANGENIETA ANNE	IM
BIGLAN,ALBERT W	OPH
BILL,ROBT O	PYA
BINGLE,GLENN JAY	IM
BISHOP,ROBERT H	
BIXLER,GLORIA A GREENEN	P
BLACK,HENRY RAY	OS
BLACKBURN,ROBT ALFRED	OTO
BLACKFORD,FLORENCE SMITH	R
BLACKFORD,RALPH ELLIS	GP
BLACKWELL,DONALD S	ORS
BLAKE,ALBERT L	IM
BLATT,ADOLPH EBNER	IM
BLIX,FRED MAYOR	FP
BLOEMKER,EDWARD F	GP
BLYTHE,JERRY EDWARD	GP
BOEN,BRADLEY NELSON	P
BOESTER,JEFFREY ALLYN	OBG
BOGGS,EUGENE FULTON	IM
BOJRAB,LOUIS DEAN	AN
BOLING,FREDERICK FRANCIS	GP
BOLING,GROVER C	GP
BOLINGER,GARRY LEE	CLP
BONAVENTURA,LEO MARK	ORS
BOND,VIRGINIA KING	AN
BOND,WM HOLMES	IM
BONSETT,CHAS A	N
BOOHER,OLGA M BONKE	PD
BOOTH,BOYNTON HOOKER	D
BOYCE,PAUL ACHILLES	DIA
BOYER,FLOYD ALFRED	GP
BRADY,THOMAS A	ORS
BRANTLY,JAMES MONROE	IM
BRASHEAR,RICHARD	PUD
BRAVERMAN,GERALD LEE	IM
BRAYTON,LEE	GP
BRICKLEY,HARRY D	GS
BRICKLEY,RICHARD AGAR	GS

MARION COUNTY MEDICAL SOCIETY

BRIGGS,ROBT WM	IM
BRILLHART,JAMES RICHARD	OBG
BRISSENDEN,REYNOLDS	OM
BROADIE,THOS ALLEN	GS
BROGAN,THOS MICHAEL	GP
BROOKS,FRED REYNOLDS	GP
BROWN,ARCHIE EMMETT	IM
BROWN,DAVID LEE	DR
BROWN,DE WITT WILCOX	P
BROWN,EARL ROBT	DR
BROWN,FRANCES TURPIN	GP
BROWN,FRANK MEUKLER	GP
BROWN,GORDON T	P
BROWN,WENDELL EDGAR	PD
BROWNING,JAMES STEPHEN	P
BROWNING,WM MADISON	OS
BROWNLEY,EMMA J	PD
BRUECKMANN,F ROBERT	ORS
BUBB,MICHAEL P	IM
BUCKEL,LARRY JOS	D
BUEHL,ISABELLE ANN DAVIS	PTH
BUNTIN,PRESLEY THOS	GS
BURDETTE,HAROLD F	IM
BURGHARD,ROLLA DALE	EM
BURNEY,BRYAN T	
BURT,MICHAEL ROBT	PD
BURT,ROBERT WM	NM
BUTLER,GEROLD THOMAS	PD
BUTLER,JOHN OLIN	IM
BUTLER,ROBT MAURICE	PD
BUTTERWORTH,JOS CHAS	U
CADIENTE,SAMSON S	GS
CAHN,HUGO M	OS
CAHN,PETER H	OPH
CALDWELL,MARILYN R	P
CALLAND,SABRA K WETZLER	P
CAMPBELL,H EDWIN	OBG
CAMPBELL,RICHARD WM	CD
CAMPBELL,ROBT L	NS
CAPELLO,WILLIAM N	ORS
CAPLIN,IRVIN	A
CAPUTI,SAVERIO	R
CARAS,JOHN ANTHONY	IM
CARTER,CHAS BENJ	NEP
CARTER,JAMES EDWARD	OBG
CASSADY,JAMES EDWIN	IM
CATTELL,LEE M	ORS
CAVINS,JOHN ALEXANDER	HEM
CHABENNE,BAHJAT S	GS
CHAPMAN,WM EDWARD	U
CHATTIN,WM R	PD
CHAVEZ,MAURO EMIGDIO	OBG
CHEN,JAMES Z W	TR
CHEN,KO KUEI	PA
CHERNISH,STANLEY M	OS
CHEUNG,AMY A	PD
CHEVALIER,ROBT BURRIS	IM
CHILDERS,LISA ANN	IM
CHIVINGTON,PAUL V	D
CHRISTENSEN,CHAS NEIL	PD
CHRISTIE,MARVIN CRANE	FP
CHRONIAK,WALTER	IM
CHUA,GONZALO TAN	R
CLARK,CHAS MALCOLM	IM
CLARK,EDWARD EDMUND	FP
CLARK,GEO ALEXANDER	OPH
CLARK,LAWSON J	OBG
CLAYTON,ROBERT THOMAS	ORS
CLEARY,ROBERT E	OBG
CLINE,DONALD LEE	OBG
CLUTTER,ROBT EDWARD	FP
COCKERILL,EDWARD MEEKS	R
COCKRELL,DALE KETE	FP
COGGESHALL,WARREN EVART	CD
COHEN,IRVING	FP
COHN,ALVIN FRANK	AN
COLLINS,HUBERT LOWELL	FP
COLLINS,ROBT CARL	FP
COLYER,ROBERT ALLAN	ORS
CONLEY,MICHAEL KENNETH	OBG
CONWAY,GLENN	US
COOKSON,LAWRENCE UPJOHN	R
COOPER,DANL F	NS
COPHER,DAVID E	OBG
CORNACCHIONE,MATTHEW	FP
CORRIGAN,MARK WELLER	AN
CORTESE,JAMES V	FP
CORTESE,THOS A	D
CORTESE,THOS ANTHONY	GS
COSTIN,ROBT LEE	PTH
COUGHENOUR,J ROBT	FP
COUNTRYMAN,FRANK W	P
CRAFT,KENNETH L	A
CRAIG,ALEXANDER F	AN
CRAMER,SAML KEITH	IM
CRAVENS,FREDERICK A	OBG
CRAVENS,ROBERT E	ORS
CRAWFORD,JOHN A	ORS
CREED,GARY ST CLAIR	FP
CROMER,JAMES STEPEN	PD
CRONIN,H JOS	R
CROSS,DAVID GEO	EM
CROSSIN,JAMES ALOYSIUS	GS
CULBERTSON,CLYDE G	PTH
CUMMING,JAMES ROOD	PD
CUMMINS,DOUGLAS F	AN
CUNNINGHAM,CAROLYN ANN	IM
CURRY,R LOUIS	FP
CUSICK,JAMES ALAN	AN
CUTHBERT,MARVIN P	OPH
CZENKUSCH,HELEN E GEYER	PD
DALEY,EDWARD HENRY	AN
DALLAS,FRED R	U
DALTON,WM WARREN	OM
DALY,JOS M	PD
DALY,ROBERT STOKE	PUD
DALY,WALTER JOS	IM
DANIEL,JOHN CARLTON	OS
DARBRO,DAVID ANTHONY	FP
DARNELL,JEFFREY CHAS	IM
DASCOLI,THOMAS C	FP
DASHIELL,JAMES RALPH	ORS
DAVIDSON,DALE A	PS
DAVIS,BENNIE LEON	U
DAVIS,EVERETT J	R
DAVIS,JAMES ROBBINS	P
DAVIS,LARRY MARVIN	P
DAVIS,MARGARET MELVINA	AN
DAVIS,SAM J	ORS
DE ARMOND,ALBERT M	P
DE BROTA,JOHN	AN
DE ROSA,GUY PAUL	ORS
DE WESTER,GERALD MAYSON	FP
DEACON,WALTER E	PH
DEAL,ELEANOR H B	FP
DEAL,MICHAEL J	P
DEARMIN,ROBT MASON	OTO
DECATUR,DAVID RICHARD	FP
DEEVER,JOHN WILKIN	OBG
DEITCH,ROBT DAVID	OPH
DENNY,DAVID M	OPH
DENNY,FORREST L	FP
DENNY,JAMES WESLEY	FP
DEOGRACIAS,MONICA D	AN

DICK,WM HENRY	IM
DICKS,ROBT EVAN	FP
DICKSON,CAROLYN H LUCAS	FP
DILL,CHAS WM	FP
DILL,MYRON K	IM
DILLON,JOHN F	R
DILTS,ROBT LOUIS	FP
DIZON,MIGUEL B	NM
DOLAN,PATRICK ANTHONY	R
DOLEMBO,JOHN MICHAEL	AN
DONATO,ALBERT MARIO	FP
DONOHUE,JOHN PATRICK	U
DORAN,JORDAN HAL	CD
DOUGHTY,SAML R	AN
DOUGLAS,WM THOS	AN
DOWD,JOS A	IM
DOWNS,KENNETH R	OM
DRYDEN,GALE EMERSON	AN
DU BOIS,MICHAEL BRUCE	IM
DUBOIS,DON RAMON	PD
DUGAN,JOHN RICKWOOD	FP
DUGAN,WM MILLER	HEM
DUNCAN,STUART JACKSON	FP
DUNKIN,RAMON SINCLAIR	PUD
DYAR,EDWIN WM	OPH
DYAR,ROBT WM	OPH
DYKE,RICHARD WARREN	HEM
DYKEN,MARK LEWIS	N
EARP,EVANSON BYERS	PH
EATON,EDWIN RAY	RM
EATON,LYMAN DALE	IM
EBERT,J WAYNE	FP
EBERTH,EDWARD PALMER	AN
ECHT,CHAS ROBT	OBG
EDMANDS,ROBT EMERSON	CD
EDWARDS,DAVID JEAN	PH
EDWARDS,JOSHUA L	PTH
EDWARDS,JUDITH ANN JOHNS	CHP
EDWARDS,WENDELL LEE	AN
EGBERT,HERBERT L	GS
EHRLICH,CLARENCE EUGENE	ND
EICHER,PALMER O	ORS
ELDRIDGE,GAIL EDWARD	FP
ELKINS,JAMES PAUL	OBG
ELLIOTT,DANL ROBT	R
ELLIOTT,WILLIAM JAMES	R
ELLIOTT,WM CROMARTIE	CD
ELLIS,FORREST D	OPH
ELLIS,WM NICOL	FP
ELMORE,MICHAEL F	GE
EMHARDT,JOHN THILO	OM
EMKES,BERNARD JOHN	FP
ESKEW,PHILIP NEWTON	OBG
EVANS,FREDERICK H	OTO
EVANS,PAUL VINCENT	PTH
EVANS,RAEBURN MAURICE	FP
EVARD,ROBERT EDWARD	FP
EVENS,MARVIN AMOS	AN
EVERETTS,DAVID R	OBG
FAILEY,ROBT B	IM
FARIS,JAMES VANNOY	CD
FARIS,PHILIP MASON	ORS
FARRELL,JOS THOS	FP
FARRIS,JOHN JOS	EM
FAUSSET,C BASIL	NS
FECHTMAN,WM FREDERICK	OTO
FEENEY,MARTIN THOMAS	OBG
FERGUSON,JEFFREY HALE	FP
FERRARA,THOS ALBERT	OBG
FERREE,H LANE	P
FERREE,MARY M	CHP
FERRY,FRANCIS A	OBG
FESS,STEPHEN WAYNE	GS
FEUER,HENRY	NS
FINNERAN,JOS CHAS	GS
FISCH,CHAS	CD
FISCH,JON	
FISCHER,A ALAN	FP
FISCUS,CLIFFORD WM	OPH
FISHER,WM PAUL	P
FITZGERALD,EDWARD BRICE	CDS
FITZGERALD,JOS FRANCIS	GE
FITZGERALD,WM JOS	FP
FLANAGAN,PAUL M	OS
FLANDERS,ROBT	IM
FLANIGAN,M B	AN
FLEISCHL,HERBERT	P
FLORA,JOS O	FP
FOGLE,NORMAN LEE	FP
FOLEY,PATRICK L	FP
FORTUNA,FRANK WM	FP
FOSGATE,HAROLD L	FP
FOSTER,LEE N	CLP
FOSTER,LOWELL GEO	P
FOSTER,RAY D	OTO
FRANKEL,GERALD JOS	U
FRANKEN,EDMUND A	PDR
FRANKLIN,WILLIAM L	ORS
FREDERICK,TERRY LEE	FP
FREED,CARL ADRIAN	OBG
FREELAND,BILL E	OBG
FREEMAN,MAX E	FP
FRENCH,RICHARD NOBLE	P
FRENCH,RICHARD STEPHENS	N
FROMHOLD,WILLIS A	IM
FRY,ROBT DE VAULT	GS
FULTON,WM HALL	N
FUNDENBERGER,MARTIN	OPH
FURMAN,ROBT H	OS
GABOVITCH,EDWARD ROBT	RHU
GABRIELSEN,TED HOWARD	GS
GADDY,NELSON DON	FP
GAEBLER,JOHN WM	PD
GAMBILL,WM DUDLEY	IM
GANADEN,EULOGIO V	P
GARBER,J NEILL	ORS
GARCIA,TIERRY F	OTO
GARD,DANL A	OM
GARDINER,SPRAGUE HEMAN	OBG
GARDNER,AUSTIN L	CDS
GARDNER,FREDERIC B	AN
GARDNER,NORMAN DAVID	R
GARFIELD,MARTIN D	FP
GARNER,WM STANLEY	FP
GARRETT,ROBT AUSTIN	U
GAURANO,LAURO M	IM
GEIDER,ROY AUGUST	FP
GEISLER,HANS EMANUEL	OBG
GENNA,MARY MILLER	OS
GEORGE,CHAS LESTER	AN
GEORGE,JOHN LAWRENCE	GS
GERTH,ROBT EDWARD	R
GETTLE,DAVID ROYCE	EM
GIBSON,GRETA MAXINE	OS
GICK,HERMAN HENRY	FP
GILKISON,WM MINOR	FP
GILLESPIE,CHAS F	OBG
GILLESPIE,JACOB EARL	FP
GILLIM,PARVIN DOUGLAS	OPH
GILMORE,RICHARD	R
GIROD,DONALD ALFRED	PDC
GLANZMAN,NORMAN	FP

MARION COUNTY MEDICAL SOCIETY

GLASSER,KENNETH L	TS
GLOVER,JOHN LEE	GS
GOLDENBERG,DAVID BARRON	R
GOLDMAN,SAML	FP
GONZALEZ,ALFREDO B	GS
GOODMAN,JULIUS M	NS
GORMLEY,JOS JAMES	FP
GOSMAN,JAMES HUBERT	D
GRABER,MARTIN J	FP
GRAFFIS,RICHARD FRED	GS
GRAHAM,JOHN DOUGLAS	IM
GRAHAM,WM EUGENE	OBG
GRAY,HOWARD R	D
GRAY,KENNETH LEE	FP
GRAYSON,MERRILL	OPH
GRAYSON,TED LINDSAY	GS
GREEN,MORRIS	PD
GREEN,OSCAR	OTO
GREENE,MORGAN E	PUD
GREGORY,ROBT LEON	DIA
GREIST,JOHN H	P
GRIEF,ROBT STEELE	FP
GRIEP,JOHN ARTHUR	PTH
GRIFFIN,LESLIE WM	OM
GRIFFITH,RICHARD S	OS
GRIMES,EVA M	DR
GRIMES,HUBERT N	PD
GRISELL,TED LEWIS	GS
GRISELL,TED WOOD	CDS
GROSFELD,JAY L	PDS
GROSSMAN,CHAS BARRIE	DR
GROSZ,HANUS JIRI	P
GROVE,DEAN ALLEN	GER
GRUBER,CHAS M	OS
HABEGGER,ELMER D	GS
HAGUE,JOHN MAURICE	RHU
HALBROOK,HAROLD G	GS
HALE,BRADFORD R	N
HALL,JACK HUETT	CD
HAMAKER,RONALD CLAIR	HNS
HAMBURGER,RICHARD JAMES	NEP
HAMM,CHAS W	PD
HANN,ELDON C	NS
HANNA,THOS ALLEN	FP
HANNAH,JOE MICHAEL	PD
HARCOURT,ROBT SHAW	HS
HARDING,M RICHARD	OPH
HARDMAN,DONALD RAY	DR
HARE,LAURA	IM
HARGER,ROBT WM	OPH
HARPER,ADA PATRICIA	R
HARRIS,CARL BENJ	OPH
HARRIS,PAUL NOEL	PTH
HARVEY,VERNE K	PH
HASEWINKEL,CARROLL WEBER	AN
HATFIELD,NICHOLAS W	OS
HAWK,EDGAR A	AN
HAWK,JAMES HUBER	OBG
HAWTHORNE,JAMES JOHN	IM
HAYMOND,JOS LAYTON	PTH
HAYNES,JOHN THOS	A
HEALEY,ROBT J	GE
HECK,LARRY LEE	NM
HEDRICK,PHILIP WM	PD
HEGEMAN,THEODORE FAYNE	IM
HELMEN,CHAS H	R
HELVESTON,EUGENE M	OPH
HENDERSON,ROSCOE C	FP
HENDERSON,TERRY LYNN	FP
HENDRICKS,FRED ARTHUR	FP
HENDRIE,HUGH CURTIS	P
HENNESSEE,SAML DENNIS	FP
HENRY,RUSSELL SELDON	PUD
HERMAN,JEAN TUCKER	N
HEROD,GILBERT THOS	TS
HERRING,MALCOLM B	GS
HEUBI,JOHN E	PD
HIBBELN,FREDERIC P	D
HICKMAN,HORACE OMER	CD
HICKS,GEO WM	OTO
HILBURN,JEFFREY W	N
HILDEBRAND,WM LEE	FP
HILL,HERBERT NOBLE	FP
HILL,JAMES K	A
HILLIS,J STANLEY	CD
HILZ,JAMES MICHAEL	TS
HILZ,MARY ANN CORTESE	R
HIMELSTEIN,NATHANIEL H	FP
HIMLER,JAMES MURAT	IM
HITCHCOCK,LARRY GEO	U
HOBBS,HUDNER L S	PD
HODEL,HARRY LEONARD	R
HODGIN,PHILLIP THOS	FP
HOGAN,MICHAEL ARTHUR	PD
HOLL,CARL W	R
HOLLAND,WM MARTIN	IM
HOLMAN,JEROME E	FP
HOLMAN,JEROME E	OS
HOOD,AINSLEE A	EM
HOPKINS,BRUCE JORDAN	OTO
HORINE,RANDALL KEITH	IM
HORNBACK,NED B	TR
HORNER,TERRY GRANT	NS
HORTON,DOUGLAS JAY	IM
HOSTETTER,MICHAEL G	U
HOUSER,D DIANE	A
HOWARD,MARY JANE	CD
HOWELL,JOS D	A
HOYT,LESTER HAROLD	PTH
HOYT,MILLARD L	P
HUBBARD,JESSE D	PTH
HUGHES,CHAS EDGAR	PS
HULL,RONALD H	P
HUNT,JAMES ANDREW	P
HUNTER,CHAS A	OBG
HURT,LAVERNE B	OS
HURWITZ,ROBT MORRIS	D
HURWITZ,ROGER ALLEN	PDC
HUSE,JOHN	GS
HUSE,PATRICIA GAIL H	PD
HUSE,WM MURRAY	OBG
HUTSON,RICHARD ALLEN	ORS
IRELAND,PHILIP HARLEY	ORS
IRVINE,WILLIAM O	ORS
IRWIN,GLENN WARD	IM
IRWIN,PHYLLIS R	FP
ISCH,JOHN HARRY	TS
ISENBARGER,KARL	FP
ISENBERG,PAUL DAVID	PD
ISKE,PAUL GEO	IM
IVERSON,ROBERT LOUIS	US
JAGER,RAMA M	CRS
JAMES,CHAS EDWARD	FP
JAMESON,ROBERT J	OTO
JANI,NATWERLAL S	FP
JARDINE,DON ROSS	ORS
JARRETT,PAUL EUGENE	OBG
JAY,JAMES MILTON	IM
JAY,STEPHEN J	IM
JENKINS,JOHN EDWARD	FP
JENKINS,ROBT EUGENE	D
JESSEPH,JOHN ERVIN	GS
JEWETT,JOE HAINES	IM
JOBES,JAMES EPLEY	OM

MARION COUNTY MEDICAL SOCIETY

JOHNSON,A CEDRIC	GS
JOHNSON,CHAS WM	OTO
JOHNSON,EARL HUNT	U
JOHNSON,FRANK	OBG
JOHNSON,JOHN CARLTON	FP
JOHNSON,THOS WILSON	OTO
JOHNSTON,CRAIG RAYMOND	FP
JOHNSTON,GERALD P	P
JOHNSTONE,DOUGLAS F	IM
JOLLY,WALTER WM	TS
JONES,ALLEN WM	IM
JONES,DAVID ERVAN	OTO
JONES,FRANCIS PAUL	AN
JONES,FREDERICK HAVEN	N
JONES,GORDON CHAS	FP
JONES,HENRY LEE	PD
JONES,RANDOLPH	OBG
JONES,RICHARD ALLEN	OTO
JONES,THOMAS A	FP
JONTZ,JON PHILLIP	AN
JORDAN,LEE GEO	GE
JOSEPH,REX MORRIS	FP
JOSEPHSON,DAVID ALAN	N
JOYNER,JOHN ERWIN	NS
JUDD,RUSSELL LLOYD	U
JUDSON,WALTER EMERY	CD
KAHLER,MAURICE V	FP
KAHN,ALEXANDER JEROME	PD
KAHN,HOWARD L	OBG
KAISER,JAMES L	ORS
KALSBECK,JOHN E	NS
KAMMEN,LEO	FP
KANE,JACK LEE	OPH
KARSELL,WM A	OBG
KATTERJOHN,JAMES CECIL	TR
KAUFMAN,MAURICE	IM
KEATING,JOHN URICH	P
KEBEL,ARTHUR PAUL	OM
KEENAN,GEO BRYAN	FP
KEENER,GERALD THERON	OPH
KELLAMS,JEFFREY J	P
KELLEY,WM EDWARD	FP
KENLEY,DAVID JOHN	OBG
KENNEDY,HUNTER FELIX	FP
KENNEDY,JOS T	AN
KENNEY,DAVID BERNARD	OPH
KERNEK,CLYDE BALDWIN	ORS
KERNER,DONALD JOE	FP
KETTELKAMP,DONALD B	ORS
KHAIRI,MOHAMMAD R ABUL	END
KIGHT,JERRY LEE	DR
KILLEN,LARRY RAY	DR
KIM,I YOUNG DAI	OS
KIM,KIL CHOL	AN
KING,HAROLD	TS
KING,JOS P	P
KING,LEROY HARRY	NEP
KING,MICHAEL STEVEN	OBG
KING,ROBT D	TS
KINGSBURY,DAVID HOMER	D
KIRKHOFF,PAUL JOS	PD
KIRTLEY,WM R	IM
KISSEL,WESLEY ALLEN	P
KLAIN,BENJ V	FP
KLATTE,EUGENE C	R
KLEIN,JOHNNY CARL	ORS
KLEIT,STUART ALLEN	NEP
KLUTINOTY,GEO	FP
KNAPEK,RICHARD MICHAEL	CRS
KOHLSTAEDT,KARL C	OM
KOHLSTAEDT,KENNETH G	OS
KOLAR,OLDRICH J	N
KONKLE,AMY D MC KAY	P
KOOIKER,JOHN E	P
KOONS,KARL M	GS
KOPECKY,ROBT RAY	OBG
KORNAFEL,LADDIE HENRY	GS
KOURANY,EDGAR	FP
KOURANY,OSCAR	FP
KRAFT,BENNETT	A
KRIEL,WM B	FP
KRYSZEK,STANLEY HENRY	OM
KUNTZ,HERMAN WM	OTO
KURLANDER,GERALD JAY	R
KURTZ,PHILIP LOUIS	IM
KURTZ,RICHARD	OTO
KWITNY,ISADORE JACOB	IM
LA DINE,CLARENCE B	FP
LAMB,EMMETT B	GS
LAMB,RUSSELL WALTER	OM
LAMBER,CHET KELLER	GS
LAMKIN,EUGENE HENRY	IM
LANDWEHR,ALFONS	PUD
LANE,C ELAINE LASHLEY	IM
LANG,JAY WM	AN
LAPP,MICHAEL ERWIN	CD
LARGAESPADA,MANUEL	GS
LASHMET,MICHAEL H	
LASICH,ANTHONY R	ORS
LAUER,DONALD HERBERT	FP
LAUTZENHEISER,RICHARD L	RHU
LAWRENCE,JAMES MELTON	OPH
LAWSON,ALLAN JOHN	PD
LEATHERMAN,HARTER L	OS
LEE,DOMINGO KING	PM
LEE,LORIN LESLIE	OBG
LEEDY,DONALD KA	PD
LEFFEL,JAMES M	GS
LEFFLER,WM T	FP
LEHMAN,EVAN LYNN	OBG
LESER,RALPH ULRICH	IM
LESHNOWER,ALAN C	GS
LEVI,LEON	IM
LEWIS,PAUL STANLEY	FP
LEWIS,R EARL	OS
LIDIKAY,EDWARD C	OBG
LIEBSCHUTZ,NORMAN HELFT	PD
LINDENBORG,PAUL GUSTAV	FP
LINDERMAN,RICHARD B	GS
LINDSETH,RICHARD E	ORS
LINGEMAN,RALEIGH E	OTO
LINK,GOETHE	GS
LITTLEFIELD,PAUL ARTHUR	AN
LITTLEFIELD,SHIRLEY D	AN
LLOYD,FRANK P	GS
LO SASSO,ALVIN M	AN
LOCKE,ROBT ALLEN	AN
LOGAN,PATRICK CLIFFORD	D
LORBER,ARTHUR	ORS
LORD,GLENN CLOVIS	FP
LORD,THOS JOS	CD
LOUDEN,ROBT W	FP
LOVE,GEO NEWTON	AN
LOWE,DANIEL KINGSLEY	GS
LOWE,JOHN CHARLES	IM
LOWES,DONALD RAY	OTO
LOZOW,DAVID	ORS
LUCAS,CLARENCE A	FP
LUGINBILL,HOWARD M	P
LUKEMEYER,GEO T	IM
LUNSFORD,THOS EUGENE	N
LUROS,JOHN THEODORE	US
LYBROOK,WM B	EM

MARION COUNTY MEDICAL SOCIETY

LYNN,GENE EDISON	P
MAC DOUGALL,JOHN D	TS
MAC WILLIAMS,ROBT HAMILL	OM
MACKENZIE,VERONICA	R
MACKEY,JOHN EDWARD	OBG
MADDEN,ROBT JOHN	AN
MADTSON,ALFRED R	GS
MADURA,JAMES ANTHONY	GS
MAGLINTE,DEAN D T	OS
MALACHOWSKI,ROBT MICHAEL	PD
MALIK,MUHAMMAD IQBAL	PTH
MALONEY,CHARLES D	PS
MAMMEN,HAROLD W	OM
MANDEL,DARREL SHELDON	R
MANDELBAUM,ISIDORE	TS
MANDERS,KARL L	NS
MANION,MARLOW WM	OTO
MANN,MORTIMER	OPH
MANNING,K RANDOLPH	ORS
MANZIE,MICHAEL WM	ABS
MARHENKE,JON DAVID	P
MARKS,JOHN SCOTT	NS
MARKSTONE,DAVID HAROLD	OPH
MARSH,CARL M	FP
MARTIN,FREEMAN	FP
MARTIN,LOREN HAROLD	FP
MARTZ,BILL L	PA
MARTZ,CARL D	ORS
MASBAUM,NED PAUL	P
MASCHMEYER,ROBT HENRY	D
MASTERS,JOHN MELVIN	OPH
MATTHEWS,WM M	AN
MAXAM,BEVERLY TRENT	GE
MAXSON,ROY VERNON	AN
MC ALEAVEY,PATRICK JOS	AN
MC AREE,FRANCIS EDWARD	OBG
MC CALLUM,DONALD CAREY	U
MC CALLUM,JAMES JOS	OPH
MC CALLUM,ROBT NEIL	CD
MC CARTHY,LEO JOS	PTH
MC CARTNEY,DONALD H	ORS
MC CLAIN,EDWIN S	OBG
MC CORD,GEO ELLIOTT	OPH
MC CUNE,WILLIAM MICHAEL	
MC DANIEL,EDWIN CORR	U
MC DOUGAL,BUD HOLLAND	GS
MC ELROY,JAMES THOS	IM
MC GARVEY,WILLIAM K	OTO
MC GOVERN,FRANCIS D	PTH
MC GRAW,WM ELMER	DR
MC INTYRE,JAMES MURRAY	CRS
MC KINLEY,A DAVID	CD
MC LAREN,DANL EDWARD	FP
MC LAUGHLIN,GORDON C	DR
MC NUTT,CYRUS CHARLES	AN
MC QUISTON,RALPH J	OTO
MC QUISTON,ROBT DOUGLAS	OTO
MEADE,DONNA JOAN	IM
MEALEY,JOHN	NS
MEGENHARDT,DENNIS S	GS
MEISENHEIMER,MARTIN P	GE
MELIN,JOHN R	OBG
MELTON,MARVIN EUGENE	PTH
MENCIAS,LEON A	GS
MENTENDIEK,MARY ANN	IM
MERCHO,JEAN PHARAON	GS
MERICLE,EARL WM	P
MERK,PHILIP FREDERICK	PD
MERSHON,JACK B	PTH
MERTZ,JOHN HENRY O	U
MICHAEL,ISAAC ELDREW	IM
MIDELKA,ANDREW	PTH
MIKULASCHEK,WALTER M	RHU
MILLER,DENNIS WARREN	AN
MILLER,FRANK HINER	OPH
MILLER,FRANK HINER	OPH
MILLER,JERRY ALLEN	AN
MILLER,JERRY ROLAND	AN
MILLER,JOHN DAVID	PUD
MILLER,L HOYT	FP
MILLER,ROSCOE E	DR
MILLER,STEPHEN THOS	GS
MITCHELL,JOHN SAMUEL	PD
MIYAMOTO,RICHARD TAKASHI	OTO
MOAK,GLENN D	R
MOE,JOHN FREDRICK	FP
MONN,LARRY NEIL	PS
MONTOYA,HENRY ELMER	RHU
MOORE,DONALD FLOYD	P
MOORE,HAROLD T	AN
MOORE,THOMAS S	PS
MOORE,THOS O	FP
MOORES,WM BRADLEY	D
MOOSEY,NEALE ANTHONY	U
MORAN,THOS EDWARD	FP
MORETTO,THOS JAMES	FP
MORGAN,MARGARET ELAINE	P
MORGAN,ROBT JOS	OBG
MORIARTY,JOHN ROBT	FP
MORRISON,ANDREW LEWIS	P
MORRISON,LEWIS E	PS
MORSE,ROBT PETER	FP
MORTON,JOS LEWIS	TR
MORTON,PHILIP MONROE	P
MORTON,WALTER PHILLIPS	U
MOSBAUGH,PHILLIP GEO	U
MOSS,BOBBY LEE	FP
MOSS,HARLAN B	GS
MOSS,HERSCHEL C	GS
MOTHERSILL,MARK HENRY	A
MOUSER,ROBT WINSTON	FP
MULLEN,JAMES B	IM
MULLER,LULLUS PETER	GS
MULLER,PAUL FREDERICK	OBG
MULLER,VICTOR H	PTH
MULLINIX,F MICHAEL	US
MUNSICK,ROBERT A	OBG
MURALI,MAGARAL S	IM
MYERS,CHAS WESLEY	OS
MYERS,ROY VERN	OS
NAGAN,ROBT FRANCIS	GS
NASSER,WM KALEEL	CD
NATION,ROBT DARRELL	FP
NAVARRO,CASIMIRO PERALTA	OS
NAY,RICHARD MARION	IM
NEED,DAVID JOHN	PD
NEED,LOUIS T	FP
NEED,RICHARD LOUIS	IM
NESTER,HENRY G	PH
NEWMAN,DANL MARQUETTE	U
NG,ANASTACIO C	R
NICELY,PAULETTE G	FP
NICHOLAS,DENNIS J	AN
NICHOLS,HAROLD GENE	P
NIE,LOUIS WM	P
NOHL,JOHN MARTIN	FP
NOLAN,ROBT BERNARD	OS
NOLIN,RICHARD THOS	FP
NORDSCHOW,CARLETON D	CLP
NORINS,ARTHUR LEONARD	D
NORMAN,WILLIAM H	ORS
NORRIS,MAX S	IM

NOURSE,MYRON H	U
NURNBERGER,JOHN I	P
O'BRIAN,EARL J	FP
OCHSNER,HAROLD CONRAD	R
OEI,TJIEN OEN	PTH
OESTRIKE,NORMAN WILFRED	N
OFFUTT,ANDREW CARROLL	PH
OLDHAM,KATHLEEN BROUGH	OS
OLVEY,OTTIS NIEL	IM
OLVEY,STEVEN EARL	OS
ONYETT,HAROLD R	FP
OPPENHEIM,BERNARD E	NM
ORFANOS,TRENT GEO	IM
OVERLEY,ROSS ALAN	P
OVERLEY,TONER MORTON	P
OWEN,JOHN ELBA	GS
OWENS,TRACY CLIFTON	P
PAGE,OLIVER WENDELL	GS
PALMER,ROBERT M	ORS
PALMER,ROBT W	IM
PANTZER,JOHN GEO	PS
PARK,HEE MYUNG	NM
PARKER,GEO FRANCIS	PDA
PARKER,JOHN FRANCIS	FP
PARKS,HERBERT EUGENE	P
PARR,ROBT LOWELL	PD
PATEL,BIPINCHANDRA A	AN
PAULAUSKAS,NINI M BERMUDEZ	TR
PAUSZEK,ROBT BRUCE	PD
PAYNTER,MORRIS BURTON	FP
PAYNTER,WM T	P
PAZ PINEDO,JUAN A	FP
PEARCE,ROBT MICHAEL	P
PEARSON,JACK WILLARD	OBG
PEARSON,JOHN STROTHER	OM
PEARSON,LYMAN REES	CRS
PECK,FRANKLIN B	IM
PECK,FRANKLIN BRUCE	IM
PEDEN,EMMA JANE	IM
PEIRCE,JAMES D	OM
PERKINS,BEVERLEY J	FP
PERRIN,JEAN	PD
PETRANOFF,THEODORE V	FP
PETRIN,THOS JOHN	IM
PFAFF,DUDLEY A	GYN
PHILLIPS,DAVID LEE	P
PHILLIPS,JOHN F	PED
PHILLIPS,JOHN F	
PICKETT,ROBT D	IM
PIERCE,EMMETT C	PTH
PILE,STAFFORD WALLACE	U
PITTMAN,JOHN NORMAN	CDS
PLAUTZ,JOSEPH WHEELER	OBG
POLLOM,STEPHEN H	
PONTIUS,EDWIN EUGENE	PTH
POPPLEWELL,ARVINE G	PUD
POULOS,WARD ELIAS	PD
POWELL,RICHARD CINCLAIR	END
PRATT,GEORGE B	R
PRIBBLE,ROBT HOWARD	PTH
PRICE,DAVID WILDE	GS
PRICE,FRANCIS W	OM
PRICE,FRANCIS WM	OPH
PRICE,JAMES OWEN	GS
PROCHOROFF,NICHOLAS	OBG
PRYOR,RICHARD C	FP
PUGH,NEWELL OSTEEN	
QAZI,HAROON MOHAMMAD	PS
QUIGLEY,GEO JOS	OPH
QUIGLEY,JOS WM	FP
RABB,HARRY SOLOMON	OS
RABER,ROBT M	PS
RADEMACHER,WADE	ORS
RAGAN,WM D	OBG
RAMAGE,WALTER FRANCIS	FP
RAMP,JERREMY M	
RAMSEY,FRANK BANTA	GS
RANDOLPH,JOSEPH C	ORS
RAO,CHALAPATHI C	AN
RAPP,GEORGE F	ORS
RAVINDRAN,RAMASWAMY	AN
RAWLS,GEO HOSEA	GS
RAY,CARL STEWART	OM
RECINTO,ANTONIO RECIO	CHP
REDDY,RAMACHANDRA K	DR
REECK,CLAUDE C	ORS
REED,PHILIP BYRON	P
REED,ROBT G	CD
REED,THOS EVAN	FP
REES,RUSSEL C	FP
REGENSTREIF,I J	OPH
REHME,CHRISTOPHER	D
REHN,CHARLES EDGAR	N
REID,CHAS ALBERT	FP
REITZ,LAWRENCE ALBERT	FP
RETTIG,ARTHUR CHAS	ORS
REYES,BIENVENIDO CASTRO	IM
REYES,NESTOR C	US
RHEE,SAE YUNG	IM
RICE,FREDERIC A	FP
RICE,RAYMOND DALTON	OBG
RICE,RAYMOND M	OS
RICE,RONALD B	IM
RICH,RICHARD BUDGE	OPH
RICHTER,ARTHUR B	CD
RIDGE,FREDERICK RAY	FP
RIDOLFO,ANTHONY S	RHU
RIGG,JOHN FLOYD	PH
RILEY,PAUL DAVID	P
RILEY,THOS WAYNE	U
RINER,JACK KEITH	GS
RITCHEY,JAMES OSCAR	IM
RITTER,MERRILL A	ORS
RITTER,WAYNE LOCKWOOD	IM
RIVERA,HECTOR P	PTH
ROACH,EUGENE GAYLE	P
ROBB,JOHN ALTON	R
ROBBINS,GORDON THOS	FP
ROBBINS,LEWIS C	GPM
ROBERTS,WARREN CHAS	OM
ROBINSON,EARLE URIAH	OBG
ROBINSON,ROBT DAWSON	CD
ROBINSON,ROBT JOHN	FP
ROCHLIN,ISIDORE	IM
ROESCH,RYLAND PAUL	AN
ROESKE,NANCY C ARNOLD	CHP
ROGERS,DONALD LEE	PD
ROGERS,ROBERT E	OBG
ROGERS,THOS PERRETTE	P
ROGGE,JAMES DELBERT	NM
ROHN,ROBT J	HEM
ROMBERGER,FLOYD T	OBG
ROSENAK,BERNARD DAVID	GE
ROSENBAUM,IRVING	PD
ROSENBERG,GABRIEL JOS	PD
ROSS,EDWARD	CD
ROTH,BERTRAM STANLEY	PD
ROTHBAUM,DONALD ALAN	IM
ROUDEBUSH,CORBIN P	END
ROUGRAFF,MAURICE EMILE	IM
ROUHANA,RODOLPH	FP
ROUSHDI,HUSSEIN ALI	GS
ROWE,GEO ANTHONY	PDS

RUDDELL,KEITH RICHARD	GS
RUDESILL,ROBT LOUIS	IM
RUSHMORE,CHAS HENRY	OM
RUSK,BARTON JAY	PUD
RUSSELL,DONALD E	ORS
RUSSELL,JOHN ROBT	NS
RUST,BYRON KENNETH	PD
RUST,ROLAND B	IM
RYAN,GLEN V	FP
RYDER,KENNETH WM	PTH
RYU,CHI YOL	DR
SABENS,JAMES ALBERT	FP
SAGALOWSKY,ARTHUR I	U
SAGALOWSKY,HOWARD SIDNEY	AN
SALES,AVELINO T	AN
SALOMON,JAIME A	GPM
SANDERS,FRED	FP
SANDERS,HARRY MUNFORD	FP
SANTOS,FRANCISCO	AN
SATO,TAKUYA	CHP
SAUER,JOHN BERNARD	FP
SCHAFFER,EDWARD V	ORS
SCHECHTER,JOHN S	IM
SCHEIDLER,JAMES A	IM
SCHEIER,EMIL WM	OS
SCHLAEGEL,THEODORE F	OPH
SCHLEGEL,DONALD M	GS
SCHMALHAUSEN,ANSEL WAYNE	GS
SCHMETZER,ALAN DAVID	P
SCHMIDT,PAUL EDGAR	CD
SCHNEIDER,PAUL A	ORS
SCHNUTE,RICHARD B	END
SCHOEN,FREDERIC L	FP
SCHROEDER,JAMES EDWIN	HEM
SCHULTHEIS,RICHARD LEE	GPM
SCHUMACHER,RICHARD R	CD
SCHUSTER,DWIGHT WM	P
SCHWARZ,ANTON JOS	IM
SCOFIELD,JOHN B	P
SCOTT,GEO EVERETT	AN
SCOTT,IVAN WINFIELD	PD
SCOTT,JOHN RICHARD	PD
SCOTT,SAML LOGAN	GS
SEAMAN,CHAS FRANCIS	EM
SEARIGHT,JOHN LEWIS	FP
SEDAM,HERBERT L	FP
SELLMER,GEO WM	FP
SENTANY,MARK I S	PS
SER VAAS,CORENA SYNHORST	OS
SERRANO,EDWARD	EM
SEXSON,HIRAM TETRICK	FP
SHAFER,MARION RUSSELL	IM
SHAH,NALIN M	AN
SHANAFELT,DONALD K	OBG
SHAPIRO,BURTON J	OPH
SHEEHAN,FRANCIS G	EM
SHELLEY,RICHARD JOS	OBG
SHERSTER,HARRY	FP
SHIPLEY,EDWARD CHAS	P
SHULL,DANL LYNN	FP
SHUMACKER,HARRIS B	CDS
SIDDIQUI,ASLAM R	NM
SIDEBOTTOM,EARL W	GS
SIDERYS,HARRY	TS
SIGMOND,HARVEY W	ORS
SILBERT,ROBT KIM	PM
SILVA,CARLOS A	GS
SILVER,RICHARD ARNOLD	R
SIMMONS,JAMES EDWIN	CHP
SIMMS,J LEON	FP
SIMS,J LAWRENCE	OTO
SINGER,MARK I	OTO
SINGH,URMILA	PD
SINKOVIC,GERALD MATHIAS	FP
SLAMA,THOS GEO	ID
SLICHENMYER,JACK ELLIS	OTO
SLUSS,DAVID H	GS
SMALL,IVER FRANCIS	P
SMITH,DAVID ELY	PTH
SMITH,DAVID LESLIE	OBG
SMITH,HOPE C	FP
SMITH,JAMES WARREN	CLP
SMITH,JERROLD REX	PD
SMITH,JOHN ARTHUR	R
SMITH,RAY C	GS
SMITH,ROY LEE	U
SMITH,WILBUR L	DR
SNELL,MALCOLM SHERWOOD	NS
SNIDER,BYRON	OS
SNODGRASS,ROBT EUGENE	P
SOBAT,WILLIAM SAMUEL	GS
SOPER,HUNTER ALEXANDER	IM
SORIA-NAVARRO,CORAZON E	OBG
SOTOLONGO,ELADIO	AN
SOULE,MARY A	OBG
SOUTER,MARTHA CHANDLEY	PD
SOVINE,JOE W	IM
SPAHR,JOHN FRANKLIN	OBG
SPALDING,JOS JOHN	OPH
SPENCE,MICHAEL B	DR
SPITZBERG,DANL HARVEY	OPH
SPOLYAR,LOUIS WM	PH
SPOLYAR,THOS MICHAEL	OM
SPURGEON,CHARLES HADDON	N
SPURGIN,GREGORY ALLAN	IM
SPUTH,CARL BROSIUS	OTO
STADLER,HAROLD E	PD
STANSBURY,WM EDWARD	FP
STAYTON,CHESTER A	R
STEELE,ROBERT JAMES	ON
STEELE,RONALD EDWARD	U
STEGER,BYRON L	OS
STEICHEN,JAMES BAPTISTE	ORS
STEIN,MARK H	PD
STEINKELER,STEVEN M	FP
STEINMETZ,EDWARD FRANCIS	CD
STEPHENS,DONALD E	FP
STEPHENS,ROBT WAYNE	OTO
STEPHENS,SUSAN ANN R	FP
STEURY,ERNEST MILLARD	FP
STEWART,PAUL NORFLEET	CHP
STILWELL,BARBARA M L	US
STOELTING,ROBT KENNETH	AN
STOELTING,VERGIL K	AN
STOGSDILL,WILLIS W	AN
STONE,ALVIN T	FP
STONE,DAVID FRED	OS
STONE,WM MAURICE	OBG
STORER,WM R	CD
STOREY,D EDMUND	IM
STRANG,WM C	P
STRANGE,PAUL S	GS
STRATE,RANDALL W	
STREETER,RALPH T	OBG
STRICKLAND,JAMES W	ORS
STRICKLAND,NEIL RICHARD	OBG
STROUD,PAUL E	OBG
STUCKY,ELSWORTH KEENE	FP
STUMP,LOYD K	IM
STUMP,THOS ALBERT	PTH
SUELZER,JOHN G	ORS
SUESS,ROBT EDWIN	IM

MARION COUNTY MEDICAL SOCIETY

SULLIVAN,JAMES JERRY	PTH
SUMMERLIN,JACK D	OTO
SUMRALL,ARTHUR JAMES	D
SURRATT,MARY A NORRIS	OPH
SYMMES,ALFRED T	IM
SZYNAL,JOHN S	GS
TALBOTT,DAN EUGENE	OBG
TANSINSIN,ROSENDO G	FP
TAUBE,JACK I	OPH
TAVEL,MORTON EDWARD	CD
TAYLOR,CLIFFORD C	R
TAYLOR,FREDERIC WM	GS
TAYLOR,HAROLD FRANK	NM
TEAGUE,FRANK W	ORS
TELLE,RICHARD D	ID
TERPSTRA,WILLIAM G	FP
TEST,CHAS EDWARD	IM
TETER,GEO VINCENT	PD
TETER,JAMES LOWELL	OBG
TETHER,JOS EDWARD	IM
THATCHER,HUGH K	FP
THOMAN,REX LEROY	IM
THOMAS,ANDREW CRAIG	FP
THOMAS,CHAS RICHARD	OBG
THOMAS,EDWARD PAUL	A
THOMAS,FRED ARVELLE	AN
THOMAS,LOWELL I	ORS
THOMAS,MORRIS E	IM
THOMPSON,JOS FRANCIS	OBG
THOMPSON,PAUL DE VIZE	OPH
THOMPSON,WAYNE H	GS
THROOP,FRANK B	ORS
THURSTON,JOHN BRADLEY	PS
TINDALL,GEO T	FP
TINSLEY,WALTER B	AN
TOFAUTE,JOHN L	ORS
TONDRA,JOHN MICHAEL	PS
TORD,JOSE N	GE
TOWNLEY,NORMAND THOS	AN
TRAINER,TOM FRANK	ORS
TRUDGEN,SPENCER FOLLIOTT	OBG
TRUSLER,HAROLD MARSHALL	PS
TUBERGEN,LAVERNE B	OTO
TUCHMAN,JOS H	FP
TUCKER,WARREN SAML	PUD
TUMULURI,V S	HS
TURRELL,EUGENE SNOW	P
TUSHAN,FAYEZ S	IM
TWENTY,JOHN DOUGLAS	FP
TYNER,HARLAN HOWARD	OPH
TZUCKER,JOHN	US
ULLOM,RALPH B	IM
VAN CAMPEN,WARREN MILTON	AN
VAN FLEET,JOSEPHINE	PH
VAN HOVE,EUGENE DENNIS	NM
VAN METER,C POWELL	FP
VAN TASSEL,CHAS J	U
VAN VACTOR,HELEN DARE	IM
VANDIVIER,JAMES M	IM
VANDIVIER,ROBT M	IM
VEATCH,RONALD I	R
VIEGAS,OSCAR J	AN
VINICOR,FRANK	END
VIX,VERNON A	R
VOLLRATH,VICTOR JOHN	FP
VON DER HAAR,GERARD A	FP
VORE,ROBT E	AN
WAGNER,VIRGINIA MEADE	PD
WAHLE,WM MONTGOMERY	PTH
WAIFE,SHOLOM OMI	OS
WAINSCOTT,CLINTON S	ORS
WALDO,JEANE THAYER	OS
WALLACK,ELIOT M	N
WALTHALL,GERALD CHAS	OTO
WALTHER,JOS E	IM
WALTON,WM M	U
WARD,WESLEY C	FP
WARNEKE,CHAS HAGER	ORS
WARNER,T MAX	PTH
WARRINER,JAMES BURTON	IM
WARVEL,JOHN HENRY	IM
WASHINGTON,WILBERT	OPH
WASS,JUSTIN LEO	DR
WATERS,GEO EDWARD	OPH
WATSON,STEPHEN CLAIR	EM
WEAVER,DOROTHY EMILY	OM
WEBB,MICHAEL KEITH	OBG
WEBSTER,MONICA MAE	IM
WELLMAN,HENRY NELSON	NM
WEST,JOS L	FP
WESTFALL,B KEMPER	OM
WHEELER,DAVID E	R
WHEELER,EDWARD CORNELIUS	R
WHEELER,LAWRENCE A	CLP
WHITE,CHAS FREDRICK	PM
WHITE,DONALD J	A
WHITE,DOUGLAS H	IM
WHITE,JOHN B	ORS
WIDDIFIELD,GARTH EUGENE	FP
WILBRANDT,HANS ROBT	OPH
WILKENS,IRVIN WM	IM
WILLIAMS,CHARLES F	
WILLIAMS,GARY CHAS	IM
WILLIAMS,HAROLD WARREN	FP
WILLIAMS,HOWARD S	GER
WILLIAMS,HUGH L	ORS
WILLIAMS,JAMES	U
WILLIAMS,PAUL DRAKE	P
WILSON,DONALD LEON	OPH
WILSON,FRED MADISON	OPH
WILSON,FRED MONROE	OPH
WINTERS,PETER LEE	D
WIREY,HAROLD RAY	FP
WISE,WM R	FP
WOERNER,LAUREL JEAN	IM
WOERNER,THOS EDWIN	CD
WOLF,HARRY COHEN	FP
WOLFRAM,DONALD J	IM
WOOD,DONALD E	IM
WOODARD,ABRAM S	FP
WOOLLING,KENNETH R	CD
WORKMAN,FRANK	IM
WORLEY,JOS PAUL	FP
WORTH,ROBT MILTON	NS
WRIGHT,JOS WM	OTO
WRIGHT,JOS WM	OTO
WU,L Y FRANK	PDA
WURSTER,RICHARD EDMUND	U
WYTTENBACH,JOHN EDWARD	OM
YACKO,MICHAEL LOUIS	AN
YAW,PETER BARNETT	GS
YERKS,THOMAS LEE	FP
YINGLING,ROBT JAMES	R
YOLLES,ELLIOTT A	OPH
YONKMAN,GERHARD FLORIAN	FP
YOUNG,EUSEBIO C	IM
YOUNG,JOHN E	ORS
YOUNG,JOHN MC CONNELL	U
YOUNG,JOHN T	PD
YOUNG,STEVEN ROBT	AN
YUNE,HEUN YUNG	DR
ZECKEL,MICHAEL LEE	IM

MARION COUNTY MEDICAL SOCIETY

ZELL,EVERTSON HYLE	GS
ZERFAS,CHAS PERRY-ALLEN	FP
ZERFAS,PHYLLIS K CATT	OS
ZIENCE,JOHN ALAN	AN
ZIEVERINK,SARA E	DR
ZIMMER,JOHN FREDRICK	PD
ZOLLMAN,CHARLES WALLACE	PS

JACKSON COUNTY MEDICAL SOCIETY

BARD,FRANK BRUCE	GP
BAXTER,HARRY R	GP
BEVERS,MARK MITCHELL	FP
BLACK,JOS MORTON	GP
BLAISDELL,WM FREDERICK	GP
BOBB,KENNETH E	FP
BOSCH,RALPH OTTO	IM
DAY,WM DURBIN CHAS	FP
GILLESPIE,GARLAND RAY	FP
KNOTTS,SLATER	R
LINSON,JOHN CARMEN	FP
MC GILL,JOEL LEWIS	PD
MILLER,HAROLD EDWIN	FP
MORRIS,ROBT LYLE	DR
RIPLEY,JOHN WM	FP
SHIELDS,JACK EMERSON	FP
SULLIVAN,JAMES M	IM
TEMPLETON,IAN SIM	GS
WEIR,GEO RUSSELL	PTH
WEIR,ROSEMARY E KOELLING	FP
WIETHOFF,CLIFFORD A	GS
WIETHOFF,RICHARD ALLEN	GS
WOLTER,CHARLES F	GE

JENNINGS CO MEDICAL SOCIETY

CALLI,LOUIS JAMES	FP
CALLI,LOUIS JAMES	IM
SCHUCK,JOHN BENET	US
THAYER,BENET WM	FP
WALTON,FRED RICHARD	GS
WARNER,FRANCES WILLIAMS	FP

JASPER COUNTY MEDICAL SOCIETY

AHLER,KENNETH JAMES	FP
BEAVER,ERNEST RAYMOND	FP
GREENE,ROBT WILKINS	FP
JONES,E F	R
KAYE,ROBERT C	FP
KEEFE,WILLIAM E	GS
LOUCK,MICHAEL	FP
O'BRIEN,FRANCIS EUGENE	FP
SCHANTZ,RICHARD	FP
SPICER,STEPHEN CHARLES	FP
WILLIAMS,PAUL ALLAN	FP

JAY COUNTY MEDICAL SOCIETY

DONNALLY,GEO ALLEN	FP
ENTNER,CHAS LEROY	FP
FITZPATRICK,JAMES S	FP
GILLUM,EUGENE MORIN	FP
HUTCHISON,J C	
KEELING,FORREST E	PD
LOPEZ,ALFONSO ESCOBAR	FP
LY,LILY ANN U H	FP
NASR,AMIN TOUFIC	PTH
RUDOLPH,ROSSER A	CLP
SCHENCK,RALPH E	ORS
SHROYER,HERBERT L	FP
STEFFY,RALPH MAURICE	FP
VORMOHR,JOS FRANK	FP

JEFFERSON-SWITZERLAND MED SOC

ADORABLE,BENEDICTO C	AN
ALCORN,MERRITT O	PTH
BREITWEISER,THOS DAVID	R
BURCHAM,JAMES BENJ	GP
COOPER,JOHN IRWIN	D
FONG,THEODORE C C	P
GRAVES,NOEL S	FP
HAMMITT,KARLEEN BASCOM	P
HARE,FRANCIS WILLIAMS JR	IM
HARNDEN,HURLBUT L	GS
HARRIS,GEO F	FP
HEATON,ELTON	PTH
JACKSON,HOWARD CLAY	FP
JOHNSON,ROBT DONALD	FP
LOVE,JOHN WM	P
MC ATEE,OTT BENTON	US
MICHL,LEON GEO	GS
MODISETT,MARCELLA L S	OBG
MULFORD,ROBT HARRY	US
PRATT,RALPH MARTIN	PTH
RILEY,HENRY SCHIRMER	FP
ROGERS,DONALD B	P
RUCKER,W RAYBURN	IM
SHUCK,WM ARTHUR	GS
SKILES,MELVIN JAMES	DR
SLOAN,W KEITH	GS
TURNER,ANNA LUCINDA GOSS	AN
VALENZUELA,DIEGO CASTRO	FP
WILLIAMS,LARRY V	GE
ZINK,ROBT OTTO	FP

JOHNSON COUNTY MEDICAL SOCIETY

BARNES,HELEN BEALL	PD
BROWN,GEO EDWIN	GP
BULLERS,ROBT CLINTON	GS
BULLINGTON,GEO EDWIN	DR
CHAPPEL,ALFRED TRUMAN	FP
CHIU,FANG LUKE	OBG
DEOGRACIAS,FRANCISCO D	GS
DEPPE,CHAS FREDERICK	FP
FERRARA,JOS FRANCIS	GS
GANNON,ANTHONY PATRICK	FP
GILLILAND,JOHN EDWARD	OBG
GOSHORN,ROBYN KENT	IM
HIBBS,WM GEO	IM
JARRETT,DAVID G	OBG
LINK,CHAS WM	FP
MACHLEDT,JOHN HENDRIX	FP
MARIANO,ARTURO S	OBG
NALLEY,JAMES HARRY	AN
NAVARRO,ALFONSO V	IM
OGLE,ROBT WAYNE	FP
PALMER,HARLEY PERRY	CLP
PROVINCE,WM DITMARS	IM
RECORDS,JOHN MERRITT	FP
REYNOLDS,PAUL DELBERT	FP
ROLLER,MAC C	FP
SCHAEFER,G L	OBG
SHEEK,KENNETH IVINSON	FP

JOHNSON COUNTY MEDICAL SOCIETY

SINGH,CHANDRABHAN	PTH
SMALL,GEO ROBT	FP
SMALL,THOS JAMES	IM
STONE,E M	US
VAN VALER,CONSTANCE R	EM
VIEGAS,BRENDA P	PD
WALTERS,JACK LEON	FP
WALTZ,CHARLES A	TS
WAYMIRE,WM MERLE	R
WEBER,STEVEN ALLEN	FP
WESEMANN,MERRILL MAX	FP
YOUNG,JOS WM	FP

KNOX COUNTY MEDICAL SOCIETY

ANDERSON,JOHN B	GS
BARRETT,THOS L	PD
BARTLETT,DONALD TALMAGE	OBG
BLACK,BOYD K	PTH
BRADFIELD,ROBT STEVEN	OBG
BUEHL,FREDERICK HELM	P
BUEHLMAN,KENNETH WAYNE	PD
BYRNE,ROBT JOS	FP
CANTWELL,EDGAR RICHARD	OPH
CHATTIN,HERBERT ODELL	FP
CLOONAN,TIMOTHY GILBERT	OR
COFFEL,MELVIN HOOKER	OPH
COMBS,DANL JOHN	IM
DAYSON,LOUIE OTTO	IM
DENNIS,JAMES ALFRED	PTH
DIXON,WILLIAM L	GS
EMERT,FRANK LEROY	OPH
EWING,NATHANIEL D	GS
FLOYD,MALCOLM STAFFORD	R
GEHRING,GORDON GRANT	U
GLAZER,BARRY M	AN
HASWELL,JOHN NOBLE	OBG
HENDERSON,LAWRENCE W	P
HENDRIX,CHAS E	IM
HERMAN,DANIEL J	ORS
HIPPENSTEEL,GERRY M	IM
HUMPHREYS,JOE E	FP
JACOMAIN,RALPH JOS	FP
KEYES,RICHARD F	PD
KINMAN,PHILLIP BRAMMER	ORS
KOONTZ,JAMES ARTHUR	P
LAZZARA,JOS VINCENT	PD
LOPEZ,EFREN RAUL	AN
MC DOWELL,MORDECAI M	IM
MC MAHAN,VIRGIL CARROL	ORS
MELCHIOR,JEROME EDWARD	U
MILLER,CHARLES L	US
MOORE,ROBT GARDNER	OR
PARMENTER,HARRY B	AN
SHANKLIN,JACK LESLIE	FP
SHELTON,N PHILIP	FP
SMITH,RALPH OGILVY	IM
SNIDER,DONALD LESTER	GS
SPENCER,FREDERIC	OBG
SPRINGSTUN,GEO HOBART	US
STEIN,RICHARD H	AN
STEWART,ALAN	IM
STEWART,J FRANK W	PUD
STEWART,RALPH WM	OPH
TURNER,THOS MICHAEL	ORS
TUTTLE,JAY R	GS
VAUGHN,WALTER R	U
VON DER LIETH,WM P CAREW	GS
WELCH,NORBERT M	U

KOSCIUSKO COUNTY MEDICAL SOC

ARFORD,JOHN ELMORE	EM
BAUM,JOHN RUSSELL	GP
BEAHM,RONALD J	PD
CROSS,RICHARD WESLEY	OBG
DACQUISTO,MICHAEL P	IM
FRANADA,HECTOR	AN
GALBREATH,RICHARD E	OBG
GROSSNICKLE,STEVEN P	OPH
HAINES,DAVID W	FP
HASHEMI,HOSSEIN	GS
HAYMOND,GEO M	GS
KEOUGH,THOS FRANCIS	CO
KIM,EUN YONG	R
KIM,IL HO	OBG
KWAK,IL S	AN
LIN,YNG CHERNG	GS
MATHEU,HERACLEO I	P
MOSER,ARTHUR LEE	FP
NOEL,LEONORA GRUEZO	PD
PARKE,WM COULTER	FP
PULLMAN,GEO R	R
ROS,GEORGE A	GS
SAWYER,DOUGLAS EARL	FP
SNIDER,ROLAND SIMPSON	FP
WHARTON,RUTH	
WILSON,WYMOND BURDETTE	FP

LA GRANGE COUNTY MEDICAL SOC

FLANNIGAN,HARLEY F	FP
HAMER,JOHN LELAND	PD
LEHMAN,KENNETH MAX	FP
MARTIN,ALLEN S	FP
MELLINGER,MICHAEL OWEN	FP
SPINDLER,RICHARD GILBERT	OM
STUDEBAKER,LLOYD R	FP
TAYLOR,MILLARD REED	FP
THOMPSON,EVAN CURTISS	FP

LAKE COUNTY MEDICAL SOCIETY

AARON,BARUCH MICHAEL	EM
ABRAMSON,ALLAN LAWRENCE	GP
ACOSTA,AMADOR ALFONSO	PTH
ACOSTA,ARACELI TERNIDA	AN
ACOSTA,CONSTANCIO BELO	PD
ADAD,WAHBI	CO
ADLARD,JOHN MARTIN	IM
ADLER,FRED	IM
AGANA,ADRIANO AGCAOILI	GP
AHN,KYUNG JIN	GS
ALFANO,PAUL ANGELO	TS
ALLEGRETTI,MICHAEL L	A
ALMASE,RODOLFO MEDENILLA	GS
ALT,EDWARD MATTHEW	FP
AMBROZAITIS,KAZYS GEO	R
AMICO,PASQUALE JOS	GP
ANG,ROBERT T	N
ANGEL,VIRGIL E	GP
ANGELES,ULDARICO A	AN
ANGULO,EDILBERTO D	PD
ARBEITER,HERBERT	PD
ARON,TITU	ORS
ARROWSMITH,JAMES LLOYD	U
ARSHAD,MAHJABIN K	P
ARSHAD,MOHAMMAD	P
ATASSI,BASSEM	U
AUBURN,RICHARD P	GS

LAKE COUNTY MEDICAL SOCIETY

AYOUB,ADEL HABIB	PUD
BADAR,GREGORIO F	P
BAGHDASSARIAN,SAHAG ARAM	OPH
BALTER,EUGENE LEE	R
BARRON,ELMER ABRAHAM	GP
BARTHELEMY,DOUGE	HEM
BARTON,REGINALD RAYMOND	GP
BECKER,SAML WM	D
BECKMAN,ARTHUR JOS	GP
BECONOVICH,ROBT	GP
BEHN,WALTER MARTIN	GP
BEISER,GEO DAVID	CD
BENCHIK,FRANK AUGUST	FP
BENDLER,CARL HENRY	GP
BERGAL,MILTON B	GP
BERNARD,MARVIN R	NS
BERNSTEIN,LAWRENCE D	IM
BERUBEN,MIGUEL F	IM
BICALHO,JOSE FERNAL	ORS
BILLENA,RAYMUNDO L	GP
BILLS,ROBT J	GS
BILLS,ROBT NOEL	GS
BIRDZELL,JOHN PERRING	EM
BLANCO,RAMON M	NS
BLEZA,MAXIMO TULABOT	OM
BOMBAR,LESLIE EUGENE	GP
BONAVENTURA,ANGELO P	GP
BONJEAN,ALFRED L	ORS
BOONE,CLARENCE WAYNE	OBG
BOONJARERN,SAMPANTA	IM
BORNSTEIN,HERSCHEL	GP
BORROMEO,VENUSTIANO H J	EM
BOYS,FAY FRANK	GP
BRANCO,ARTHUR MATTHEW	GS
BRANDMAN,HARRY	P
BRASOVAN,SRBISLAV N	OBG
BRAUER,ABRAHAM A	P
BRENNAN,BETSY BECKER	D
BRENNAN,WM CLARENCE	GS
BRENNER,HOWARD B	OBG
BRINCKO,JOHN	U
BRODERSEN,JAMES DENNIS	OPH
BROOMES,EDWARD LOUIS	GP
BROWN,LEO RALPH	GP
BRUBAKER,THOS ALBERT	IM
BRYANT,EDWARD GAREY	GP
BUKATA,PEDRO	OBG
BUNAG,HOMER UY	OTO
BURTON,ROBT L	OM
BUYER,RICHARD	IM
CABE,CLAUDIO M	AN
CAMPAGNA,EDWARD A	PH
CARBERRY,GEO AUGUST	OBG
CAREY,JOHN ALBERT	FP
CARLOS,CRISOSTOMO J	CDS
CARMODY,RAYMOND F	OPH
CARPENTER,BENNIE F	IM
CARPO,SUSAN B	AN
CARROLL,MARY E DAVIS	FP
CARTER,JOHN OREN	FP
CASTOR,CONRADO P	CD
CEBEDO,JAIME J	R
CESPEDES,CARLOS ALBERTO	GS
CHA,JIN SUCK	OBG
CHAEL,THOS C	US
CHAN,PAULINO Y	ORS
CHANG,ILWOONG	IM
CHEN,JAMES J	ORS
CHERMEL,IVAN LEONARD	DR
CHIP,JEROLD NORMAN	CD
CHIVAPRUK,CHARAT	AN
CHO,FRED S	IM
CHONA,ALFRED	FP
CHOSLOVSKY,SYDNEY	R
CHUA,FARIDA ISIP	US
CHUA,FELIPE S	CDS
CHUBE,DAVID DEMARET	FP
CHUNG,DOUG JAE	OBG
CHY-KOA,LETICIA K	PD
CLARO,JOS JOHN	AM
COOK,RICHARD OWEN	FP
COOPER,LEO KENNETH	OS
COSTELLO,ALBERT J	OBG
COTTER,EDWARD RICHARD	GS
CUSTODIO,CAMIA ACEVEDO	AN
DAINKO,ALFRED JOS	GS
DANIEL,ROBT ALBERT	PD
DARLING,DOROTHY RUTH	AN
DAVE,VIJAY B	CD
DAVIDSON,CHAS O'DELL	OBG
DE BOIS,ELON	FP
DE LA COTERA,FREDERICK G	FP
DE LA PAZ,OSCAR GUEVARA	U
DE MELO,LUIZ PEREIRA	ORS
DE PORTER,LOUIS ALPHONSE	FP
DEEN,CHRISTOPHER	OPH
DEMICHAEL,DANIEL L	PTH
DENNISON,KUMPOL	GS
DESAI,SHREYAS A	IM
DESCHAMPS,DOMENICO JOSE	P
DHANA,SRIKIETR	PDC
DIAMOND,HOWARD MICHAEL	U
DIMAILIG,GREGORIO H	FP
DIMITROFF,LAMBRO	FP
DIVCIC,BORIVOJ SRETEN	P
DIZON,BELEN RODRIGUEZ	AN
DIZON,GUALBERTO REYES	FP
DJUROVIC,NADEZDA ASPARUH	IM
DJUROVIC,ZARIJA	FP
DOHERTY,RAYMOND JAMES	FP
DONEFF,RONALD HAROLD	D
DOUMANIAN,HERATCH O	R
DRAGOMER,ANDREI S	DR
DUMANIAN,ARA VAHAN	CD
DUNNING,PRESTON M	OM
EBERT,TERRY WAYNE	D
EGGERS,HENRY WM	OBG
EGNATZ,CHAS DYKE	FP
EGNATZ,NICHOLAS	FP
ENGLISH,HUBERT MORTON	FP
ERTAN,BEHIC M	IM
ESPINO,JOSE CANCIO	GS
ESPY,THEODORE R	FP
ESTACIO,ROMEO Y	FP
EUGENIDES,TATIANA X S	PD
FADUL,ARMAND	IM
FALCON,NIMITZ PRUDENCIO G	AN
FARINAS,CIRILO T	PTH
FAULKNER,DONALD JOS	FP
FELDMAN,HOWARD EUGENE	OM
FELDNER,RONALD PETER	FP
FERRER,JAVIER C	OTO
FERRY,JOHN LUMICE	IM
FETROW,KENNETH O	ORS
FISCHER,BURNELL	AN
FISHER,THOS FORREST	OM
FITZPATRICK,WM J	GS
FLORCRUZ,ARTURO ROXAS	GS
FOX,JACK MILLER	D
FRAHM,CHAS JOS	CD
FRANKOWSKI,CLEMENTINE E	PH
FRIEDMAN,ISADORE E	OPH
FRIESKE,DAVID ALLEN	P

LAKE COUNTY MEDICAL SOCIETY

GABATO,MANUEL BARDOS	IM
GAILANI,SALMAN DIA	IM
GALANTE,ALBERT	OBG
GALANTE,GLORIA	P
GAMBETTA,MIGUEL	CD
GEHRING,THOS ALBERT	FP
GEVIRTZ,MILTON BERNARD	GS
GILLES,PIERRE LOUIS	OPH
GIRAGOS,HENRY G	TS
GIVEN,GILBERT Z	PD
GLOVER,WM J	GS
GOEL,ARUN KUMAR	IM
GOEL,SARLA KANAL	PD
GOLDBERG,HAROLD BENJ	OS
GOLDENBERG,MITCHELL E	PS
GOLDING,ROBT FISCHER	AN
GOLDSTONE,ADOLPH	FP
GOLDSTONE,JOS	FP
GOLDSTONE,SIDNEY RICHARD	FP
GOMEZ,CESAR MORALES	FP
GONZALES,SESINANDO A	OBG
GOODWIN,THOS GERALD	FP
GORDON,MARK	O
GORDON,ROGER DREW	FP
GORELIK,MARCOS	PDA
GRABOW,EMIL FRANCIS	OPH
GRANT,BENJ FRANKLIN	FP
GRAYSON,FRED EDWIN	U
GREENBERG,BURTON HOWARD	CD
GREGOLINE,EUGENE PAUL	OBG
GREISEN,JACK CHAS	FP
GROSS,JOS OSCAR	PD
GROSSO,WM GEO	FP
GUSTAITIS,JOHN WM	OR
GUTIERREZ,PETER EMANUEL	FP
HADEY,JAMES H	OBG
HADIDIAN,HENRY ARAM	CDS
HAGERMAN,LAWRENCE	PD
HAHN,PAUL SANGHO	R
HALUM,RAMON GAYLON	U
HAMANG,PETER MICHAEL	GS
HAMMER,MICHAEL	OBG
HAMMOND,STANLEY MEAD	P
HAN,DANL	PTH
HANKIN,LAWRENCE G	U
HARPER,JAMES WINSTON	FP
HARVEY,DAVID M	ORS
HEDRICK,JAMES T	FP
HEHEMANN,WM VINCENT	FP
HELMS,CHAS EDWARD	GS
HERNANDEZ,ILUMINADA C	FP
HIEBER,FRANK REYNOLDS	IM
HIRSCH,MELVIN LEONARD	IM
HOIT,LEONARD	D
HOLLIDAY,ALFONSO DAVID	GS
HOOKER,REX RAYMOND	OS
HORST,WM NICHOLAS	FP
HOVANESSIAN,RAFFY A	GE
HUANG,TSAU-YUEN	PTH
HUSTED,ROBT G	FP
IMPERIAL,BENJAMIN E	FP
JACOBO,MIGUEL JAIME	FP
JAO,RODOLFO L	ID
JEHA,MIKHAIL FARID	OR
JIMENEZ,FELICIANO F	IM
JOHNSON,ARNOLD LEE	OBG
JOHNSON,FRANCIS NEAL	AN
KAMEN,JACK M	AN
KAPOOR,GURBACHAN SINGH	R
KAUFMAN,ALAN	NS
KELLAR,PHILIP ERNEST	FP
KELLY,GEO GREGORY	GS
KELSEY,JUDITH ANN	OR
KENCOS,JOHN	IM
KENDRICK,FRANK JENNESS	D
KENNEY,FRANCIS DAVID	GS
KESKIN,IBRAHIM	AN
KHATON,ODESSA M	P
KIM,CHINSOO WHANG	PD
KIM,MU SHIN	US
KIM,YOUNG ROCK	OBG
KIM,YOUNG	PTH
KINASIEWICZ,LEON E	R
KING,JOHN THOMAS	OBG
KING,ROBT W	FP
KINO,GEORGE Y	PTH
KITT,WALTER	P
KMAK,CHESTER JOHN	OBG
KOBRIN,MEYER WALTER	FP
KOLETTIS,JOHN GEO	FP
KOPCHA,JOS EDWARDS	OBG
KORANSKY,DAVID SYDNEY	OPH
KORN,JEROME MARTIN	FP
KOTT,ALEXANDER	OR
KRISHNA,DEV B N	GS
KRSEK,ARCHIE JOHN	FP
KUDELE,LOUIS THOS	AN
KUHN,ARTHUR J	OTO
KULSAKDINUN,CHAIRAT	PD
LA FOLLETTE,FORREST R	FP
LABITAN,CESAR CANONIGO	EM
LACERA,DONALDO E	PTH
LANMAN,JOHN U	IM
LARSON,MICHAEL S	P
LAUTZ,HERBERT A	OTO
LEBIODA,HENRY STANLEY	FP
LEE,ALMON SEEMAN	IM
LEE,DANG-TZUOH	OBG
LEE,MU-RONG	OBG
LEMAN,EUGENE	R
LEVIN,HARVEY JOS	GS
LEVIN,MARC A	NS
LEWIS,LUCIEN A	PD
LILAGAN,FLORENTINO RAMOS	GS
LIN,SHOU-GEM	GS
LIPSEY,ALFRED JOS	R
LOH,HWEI-YA CHANG	PTH
LOH,JEROME WEI-PING	PTH
LONA,MARCO ANTONIO	IM
LOPEZ,FILEMON PASION	FP
LOPEZ,SANTIAGO A	OBG
LOVELL,MARTIN HUTSON	FP
LUK,PETER	PTH
LUNA,MANUEL R	OBG
LUNDEBERG,RALPH ALVIN	FP
LUTZ,ANDREAS	OBG
LUTZ,GEORGIANNA	FP
LYTWAKIWSKY,ANATOL	PM
MADARANG,NAPOLEON M	FP
MAOLANG,RODOLFO M	U
MADRILEJO,NORA GUEVARA	AN
MADRILEJO,ROBERTO B	OM
MAJMUDAR,DEEPAK MADANLAL	OBG
MANGAHAS,JOVENCIO P	FP
MANGAHAS,VIOLETA RIVERA	AN
MANLEY,FLOYD	FP
MANSUETO,MARIO DANL	HNS
MANZANO,EDMUNDO V	AN
MARCUS,MORRIS C	OTO
MARKS,ORA LEONARD	OBG
MARKS,SALVO PHILIP	OPH
MAROC,JAMES ALLEN	FP

MARQUINEZ,ADORACION A	AN
MARSHALL,WILBUR JAMES	OBG
MARTINEZ,LUIS DIA	ORS
MARTINO,ROBERT S	ORS
MARTIREZ,NAPOLEON A	GS
MASON,EARL JAMES	PTH
MASON,JOHN CHAS	FP
MASON,RICHARD L	R
MC DONALD,WALTER EVERETT	GS
MEDINA,ANGELINA VELOIRA	FP
MEDINA,HERBERT LEONARDO	FP
MEHTA,MAHESH P	EM
MILAN,SHIJACHKI DUSHAN	FP
MILLAN,FELIX	PM
MILLER,DONALD C	FP
MILOS,ROBT JOS	GS
MIN,DAVID PYONG-WHA	OBG
MINCZEWSKI,RICHARD C	FP
MINKIN,RONALD BLAINE	D
MINTZ,ALFRED M	ORS
MIRICH,ERNEST C	CD
MIRRO,JOHN ANTHONY	FP
MIRRO,JOHN ANTHONY	GE
MISCH,WM A	FP
MITCHELL,GEORGIA BONE	FP
MOFFETT,JAMES B	A
MOLENGRAFT,CORNELIUS J	OBG
MONKS,JAMES L	GE
MONTES,HERMINIO Y	AN
MONTUORI,GIULIA	GPM
MOORE,EDWIN GRIFFEN	FP
MORGAN,RANDALL C	ORS
MORRIS,WM HAROLD	PD
MOSWIN,JACK ARTHUR	OBG
MOTT,H WILLIAM	ORS
MOULTRIE,H CARL	IM
MURILLO,HERBERT LAURON	EM
MURPHY,JOS FRANCIS	P
NAKAMURA,TAKAMITSU	OTO
NAZON,YVON	OBG
NEAL,LEONARD WILSON	FP
NEER,DAVID DREW	N
NELSON,WALFRED ARTHUR	FP
NICOSIA,JOHN B	FP
NOWLIN,WM FELBERT	GS
OBAID,NAZZAL	CD
OBERLANDER,SEYMOUR	IM
OLUFS,RICHARD DEAN	PD
ORNELAS,JOS PAUL	A
PACIS,WILHELMINA CORTEZ	US
PAIK,DO JI	R
PALMER,BARRON M F	US
PAMINTUAN,FLORINO GANDO	CD
PANARES,RODRIGO REX	FP
PAPPAS,EDDIE THOS	FP
PARGAONKER,MAKRAND U	GE
PARRATT,LOUIS WARDROP	FP
PATEL,DINESHCHANDRA A	PD
PATEL,RASHMI CHIMANLAL	GS
PATEL,UPENDRA H	ORS
PAUL,EUDELL GEO	GS
PAVELKA,RONALD PETER	ORS
PAYNE,ARTHUR C	FP
PEIFFER,GERALDINE M	AN
PENA,ADELA P	OS
PENN,ROBT ALLAN	FP
PEREZ,ADELA M	IM
PESIGAN,CONRADO SISON	R
PETTIS,ARTHUR GLASCO	AN
PHILLIPS,DONALD MICHAEL	FP
PIERCE,WM JOHN	FP
PILLAY,VIJAYAPRASANTHAN	NS
PILOT,JEAN	PTH
PLATIS,JAMES MARK	PS
POLITE,NICHOLAS LOUIS	OBG
POLYDEFKIS,DIMITRI GEO	P
PORAPAIBOON,VEERA	TS
PORTNEY,FRED R	U
POTTI,T K KRISHNAN	IM
PREDEY,THOS	FP
PREMUDA,FRANKLIN FRED	EM
PRUITT,JACOB E	FP
PURCELL,RICHARD J	FP
QARNAIN,SYED F	P
RAHMANY,MOHAMMAD ASEF	FP
RAMKER,DANL THEODORE	GS
RASCH,GEO C	GS
RAWLINS,CAROLYN N MANN	OBG
RAWLINS,STEVEN JOE	R
RAYMUNDO,LUCIANO CABATE	ORS
REED,JOHN JOS	FP
REED,RONALD RILEY	IM
REITMAN,PAUL HENRY	R
REMICH,ANTONE CHAS	OM
RENDEL,DONALD T	PD
REPAY,WALTER ALLEN	FP
REYES,ANGEL I	EM
RIESER,ALOYS MARTIN	CLP
RIVERA,FERNANDO H	FP
ROIG,JOSE HUGE	OPH
ROSARIO,MANUEL ZARAGOZA	PTH
ROSENBLOOM,PHILIP JACK	PH
ROSENTHAL,CARL	R
ROSEVEAR,HENRY JOS	GS
ROSS,DAVID EUGENE	FP
ROTH,LEO	ORS
RUBIN,SIMON SYRIL	A
RUDSER,DONALD HARRY	FP
RUSSO,ANDREW ESCHER	FP
RYAN,HUBERT JOS	PD
SAAVEDRA,BERNARDO	NS
SABO,WILLIAM J	ORS
SALA,JOS JOHN	FP
SALA,WALTER RUDOLPH	FP
SALEH,IBRAHIM MITRE	OBG
SANTARE,VINCENT JOS	U
SCHAROFF,JAY ROBT	NM
SCHLESINGER,DANL J	GS
SCHMITT,ROBT J	P
SCHULZ,KURT J E	OPH
SCHWARTZ,JACK	OBG
SCHWARTZ,MAGDA	AN
SCULLY,JOHN T	IM
SEBASTIAN,RICARDO F	EM
SEMERDJIAN,ARAM	R
SERNA,CARLOS A	IM
SERRANO,JOSE FLORENTINO	ABS
SHAH,RAMESHCHANDRA L	IM
SHAPIRO,SEYMOUR WM	GS
SHETTY,DAYANANDA M	OTO
SHULRUFF,HARRY I	OPH
SIEKIERSKI,JOS M	FP
SINCHAI,PRAVIT	OPH
SKLENARZ,KRYSTYNA MARIA	P
SLAMA,GEO FRANCIS	GE
SMALLS,GEO DOUGLAS	U
SMEJKAL,JERALD J	PS
SMITH,BERNARD	IM
SMITH,JERALD E	FP
SMITH,THEODORE J	OM
SMITLEY,ROGER P	IM
SOKOL,ALLEN B	PD

LAKE COUNTY MEDICAL SOCIETY

SOLIS,ROGER VALBERG	OBG
SOLOMON,SAMUEL	
SOMANI,INDRA KUMAR	PTH
SONG,JOHN YE KUN	FP
SORAK,KATICA	OR
SORCANO-APELLIDO,LIBERACION	AN
SRI,PRASIT	ORS
SROKA,STANLEY JOS	FP
STASICK,MURRAY	FP
STECY,PETER	FP
STEELE,EVERETT B	FP
STEEN,LOWELL HARRISON	IM
STEMER,ALEXANDER A	ID
STERN,MONA KAUFMAN	FP
STEVENS,EDWIN W	IM
STEWARD,PAUL WAYNE	FP
STOOKEY,RICHARD DON	FP
STOVER,MERVIN C	PD
SUN,CHAW P	OBG
SUWANWILAI,CHAROEN	PTH
SZANTO,PHILIP A	PTH
TABION,NAPOLEON C	U
TAN,JUAN	EM
TANRIKULU,ORHAN	PD
TEEGARDEN,JOS A	FP
TEMPLIN,DAVID BROWNING	FP
THEPHASDIN,JIROJ	NS
THOMAS,DANL D	CRS
THOMAS,GERALD JAY	GS
THUPVONG,CHAWTIPYA D	AN
THUPVONG,KOSIN	CDS
TIFFANY,JOS CALVIN	GS
TILKA,EDWARD CHAS	FP
TOUSSAINT,LINNE FENELON	AN
TOWANNASUT,VERAPON	OTO
TOYAMA,TSUYOSHI	AN
TRACHTENBERG,LEE H	OPH
TREMOLDA,JUAN A	OBG
TRENKNER,JOHN DAVID	FP
TROY,JACK MILTON	PD
TSAI,SAN HUA	OBG
TURGI,ROBT W	OTO
TYRRELL,JOS J	GS
TYRRELL,THOS CARROLL	GS
UNNI,RAMAKRISHNAN P	U
URBA,VYTAUTAS VICTOR	P
URBANSKI,WALTER PATRICK	OBG
VACHIRASOMBOON,THONGCHAI	AN
VALENCIA,MONICO M	ABS
VALENZUELA,ROBERTO D	FP
VALENZUELA,SOFIA SALOMON	PD
VANDER TOLL,DONALD JOHN	GS
VELASQUEZ,ARMANDO	GS
VELUZ,MARIO ISAAC	P
VERGARA,ABELARDO F	OM
VOLAN,GEORGE J	GS
VOORHIES,MC KINLEY	FP
WADLE,ROBERT HAROLD	PD
WAISS,ELAINE HELEN	FP
WALKER,ADOLPH PAUL	AN
WALSH,JAMES BERNARD	IM
WANG,TIEH CHUN	PTH
WATTS,EDWIN SCULLY	P
WEINBERG,BENJ A	FP
WEINBERG,HOWARD J	PS
WEISKOPF,HENRY S	OPH
WEISS,BRIAN H	FP
WESTHAYSEN,PETER V	NS
WIGUTOW,MARCOS	P
WILLARDO,ALBERT THOS	FP
WILLIAMS,ALEXANDER S	FP
WILLIAMS,EDWIN DANL	FP
WINTER,DONALD K	FP
WOLF,ROBT ALLEN	FP
WOLFF,LARRY H	OPH
WONG,SAML NIEN TSU	GS
WONGSE SANIT,YONG YOTS	AN
WONGSE-SANIT,VATCHARA M	AN
WOODBURN,ROBERT T	HEM
WOODEN,THOS FRANKLIN	AN
WYLIE,ROBT REED	FP
YANG,IN WHAN	OBG
YAST,CHAS JOS	OTO
YEE,LUCIO CHIONG	FP
YERETSIAN,ARA KHOREN	P
YOCUM,PAUL S	OPH
YOCUM,WM STONE	GS
YOU,KWANG-DUCK	TS
YOUNG,FREDERIC DOUGLAS	OPH
YOUNG,ROBT LAWRENCE	OPH
ZABANEH,SAMIR I	OBG
ZALLEN,STANLEY GEO	FP
ZIVICH,JOHN M	FP
ZUCKER,EDWARD	PS

LA PORTE COUNTY MEDICAL SOC

AGRAWAL,AMARNATH B	IM
ARNEY,AMOS	GP
BACKER,GEO P	R
BACKER,MARY B YEAGER	IM
BALINAO,REUBEN CASTILLO	AN
BANKOFF,MILTON LEWIS	GP
BATACAN,GEO ACOSTA	P
BATTLE,FREDERICK GERALD	GP
BERGAN,JOS ANTHONY	GS
BERKSON,MYRON E	P
BLAIR,WILLIAM EDWARD	ORS
BREMER,WINDHAM	R
CARPENTIER,JAMES ROBT	IM
CONSTAN,EVAN	P
DATZMAN,BASIL JOS	FP
DIAN,AUGUST JOS	P
EDWARDS,JAMES LARKIN	PD
ELSHOUT,CLEMENT H	AN
ERWIN,WINFORD ROBT	FP
FROST,ROBT JOS	PTH
GALINIS,ALGIMANTAS JOS	FP
GARDE,RODRIGO CARPIO	GS
GARDNER,MELVIN DUANE	ABS
GARDNER,RUSSELL ALLEN	OBG
GILMORE,ROBT WM	PD
GILMORE,RUSSELL ADAMS	FP
HAGENOW,CHAS FREDERICK	FP
HAY,GENE R	IM
HENDERSON,NORMAN CHAS	OTO
HILL,THEODORE ALBERT	P
HILLENBRAND,CHAS JOHN	P
HODONOS,PHILLIP ELI	FP
HOGLE,FRANK D	P
HOUCK,RICHARD JAMES	OPH
JACOBI,MARK DAVID	PD
JANOVSKY,CHARLES T	FP
JENSEN,JAMES WALDEMAR	OBG
JONES,KING SOLOMON	FP
KELSEY,ROBT MOFFAT	FP
KEMP,JOHN THEODORE	FP
KERRIGAN,ROBT LEE	FP
KIM,JOON SUN	PTH
KROCZEK,STEPHEN ERIC	OPH
KUBIK,FRANCIS JOS	ABS

LA PORTE COUNTY MEDICAL SOC

LALANI,ABDUL SULTAN	OTO
LIDDELL,CHAS KEALLY	GS
LUCE,JOHN WEBB	OBG
MANNION,RODNEY ANTHONY	U
MARSKE,ROBT L	PD
MC BRIDE,ROBT EDMUND	PTH
MC CLURE,CHESTER FERRIS	P
MILLER,MAURICE	FP
MILNE,WALTER SCOTT	IM
MLADICK,EDWARD A	ORS
MOORE,WM GILBERT	GS
MOOSEY,LOUIS	FP
MUELLER,EDWIN C	GS
O'BRIEN,RAYMOND J	ORS
OAK,DAVID DWIGHT	FP
PAIK,GUN SIL	OBG
PHILBROOK,SETH S	OPH
PHILLIPS,JOHN HARMON	FP
PILECKI,PETER J	FP
PLANK,RICHARD S	R
POPLAWSKI,HENRY	FP
POTTER,BRIAN S	D
PREDD,ADOLPH C	FP
PREDD,FLORIAN MARTIN	GS
PULIDO,DAVID R	GS
RICHTER,JOHN CARL	GS
RIVERA,FELICIDAD BALIDO	AN
RIVERA,JULIUS PEREGRINO	GS
SADDAWI,DAVID N	PS
SALSBURG,HERBERT E	P
SAMALIO,JUSTO R	AN
SANCHEZ,JOSE DOLORES	AN
SAYLORS,RODGER DALE	FP
SCOTT,JOHN SPAHR	R
SCUPHAM,WM KENT	IM
SIRUGO,ALDO CORRADO	OTO
SKAFISH,PETER R	
SMITH,LE ROY A	ORS
SPRECHER,JAMES JOHN J	FP
STARK,WILLIAM A	ORS
STILLER,AILEEN GRIFFIN	OBG
STILLER,ERNEST WM	ORS
TICSAY,BENVENIDO V	U
VON ASCH,GEO FREDERICK	FP
WALTERS,WM HAROLD	CRS
WEISS,ALBERT EMIL	FP
WENINGER,DONALD LEE	AN
WOLF,WM EDWARD	AN
ZAHRT,FRANK H	FP
ZALAC,DONALD ALBERT	R

LAWRENCE COUNTY MEDICAL SOC

ARDALAN,ABDOLAZIZ MOEZ	GS
AUSTIN,RICHARD PAUL	GP
BENHAM,LAWRENCE E	GP
BORHAN,ZIA	OBG
CROSBY,REID CLIPP	OBG
DINO,FLORIAN SOTTO	GS
DONNER,DONALD D	DR
DUNCAN,RAYMOND E	FP
DUNDEE,JOHN THOBURN	R
DUSARD,JOS CAVANAW	FP
EDLER,ROBERT WM	OPH
EMERY,CHAS BARTLETT	FP
FOUNTAINE,THOS JAY	FP
GIRGIS,MEDHAT HELMY	IM
HAMILTON,JAMES ROBT	FP
HAWKINS,RICHARD DALE	PD
HUBER,RICHARD GLEN	FP
JOHNSON,WALLACE D	GE
KADERABEK,DONAL JOS	GS
KASTING,GERALD E	FP
KERR,DONALD MILTON	FP
LIVINGSTON,PETER HOWARD	U
MORROW,ROBT JACKSON	FP
MOUNT,JAMES LEE	OBG
NOE,WM ROBT	GS
ODULIO,BENITO V	GS
ODULIO,BRUNHILDA IRIS	IM
OSWALT,JAMES TELFER	US
PILLAI,VIJAYAN V	GS
REUTER,JOHN WESLEY	OPH
SAMADDAR,PRASOON KUMAR	OTO
SAMI,ABDEL W	PTH
SANGALANG,ZENAIDA S	EM
SERA,SEGUNDO R	PD
SMITH,BYRON DELFORD	PTH
SORRELLS,GEORGE W	PD
TAN,EUGENIO N	AN
WALDO,GUY HAROLD	IM
WOHLFELD,JULIUS B	CD
WOOLERY,RICHARD HENRY	AN
WRIGHT,ROSS STANLEY	GS

MADISON COUNTY MEDICAL SOCIETY

ABELL,WM AUSTIN	P
ALLEN,LAWRENCE E	U
ANDERSON,WM STAFFORD	FP
AUSTIN,CHAS E	GP
BAUGHN,WM LUTHER	OM
BEELER,FRANKLIN K	FP
BEGLEY,ROBERT WILLIAM	US
BENEDICT,HAROLD GAYMAN	GP
BIXLER,DONALD PAUL	OPH
BLASSARAS,CRIST A	GP
BOWERS,CHAS RICHARD	GS
BRIDGES,ALVIN L	FP
BRIGHT,THOMAS PETER	
BUCKLES,DAVID LUDY	CLP
BUECHLER,WM F	GP
BUSH,EDWARD ROBT	GP
CAMPBELL,FRANK	FP
CARREL,EDSON DREW	ORS
CHAMBERS,RICHARD KELLY	IM
CHUNG,ANDREW IL-SUNG	FP
COPELAND,JOS CONRAD	IM
DANIEL,GERALD OWEN	R
DAUS,MILTON J	FP
DENNY,MELVIN HARVEY	AN
DIXON,REX WM	A
DONALDSON,FRANK COOMBS	OBG
DRAKE,JAMES RICHARD	FP
DRAKE,JOHN CALVIN	GS
DRAKE,MARION CLIFFORD	FP
DRENNEN,ROBT VORRIS E	CD
DULIN,BASIL BURTON	R
FAUST,HOWARD MACY	FP
FEDOR,THOS ANTHONY	P
FERGUSON,DONALD H	IM
FERRELL,MARS BENTON	FP
FISCHER,WARREN E	R
FITZPATRICK,HARRY W	FP
FOLEY,PHILLIP DELANO	FP
GAHIMER,JOE EDWARD	IM
GALLANOSA,ARTURO G	AN
GAUNT,EVERETT WELKER	FP
HANSON,MARTIN F	FP
HENSLER,BENTON MOSES	FP
IRWIN,GERALD PORT	FP

MADISON COUNTY MEDICAL SOCIETY

JARRETT,PAUL EUGENE	OBG
JONES,DAVID GEO	FP
JONES,JOHN DAVID	OPH
KAYE,STERLING S	
KEPNER,ROBT STANLEY	PD
KIELY,JOHN T	FP
KING,CHAS ROSS	FP
KING,JOS WHEELER	OTO
KOPP,WM R	GS
LAND,RICHARD NELSON	R
LARMORE,JOS LOWMAN	OPH
LAUDEMAN,WALTER A	FP
LEAHY,HOWARD JOS	FP
LIM,NUNILON CARRANZA	IM
LITZENBERGER,SAM W	U
LONG,PAUL LAPPLE	FP
MARTIN,DAVID LEE	D
MC CURDY,ROBERT WILLIAM	GS
MENGELT,THOS PAUL	FP
MESHBERGER,FRANK LYNN	OBG
MONEYHUN,JAMES EMMETT	FP
MORRIS,ROBT ALLEN	PD
MUSNGI,LUCIANO PESTANAS	FP
NEALE,ALFRED EUGENE	US
OLDAG,GEO EDWARD	GS
OVERPECK,GEO H	FP
OWEN,THOS FREDRIC	FP
PATTERSON,WM K	AN
POLHEMUS,JAY KENT	AN
POLHEMUS,WARREN C	FP
PRICE,AMBROSE MADISON	FP
RAMSEY,PAUL L	ORS
RAY,ALAN S	R
RAY,JOANNE P TRIXLER	PD
RAYMUNDO,VIVENCIO F	GS
REED,ROGER ROLLIN	ORS
REYNOLDS,RALPH EDWARD	AN
RIDGWAY,ALTON H	FP
ROSENBAUM,LLOYD E	CD
ROSS,GUY EVERETT	PD
SCEA,WALLACE A	FP
SCHEMMER,KENNETH EDWIN	GS
SCHUBERT,ESTHER	
SHAFFR,RICHARD H	FP
SHARP,WM LELAND	P
SHELDON,SUEL A	D
STAMPER,JOS HERBERT	AN
STAMPER,ROBT J	FP
STARKS,WILLIAM O	ORS
STEVENSON,JERRY L	PTH
STINSON,WM MEFFORD	FP
SZUMILAS,PETER PAUL	OBG
TAYLOR,JAMES ALVIN	OM
TIERNEY,WM JOS	GS
VAN NESS,WM CHAS	US
VAN NESS,WM CHAS	FP
WAGONER,JOHN ROBT	U
WEBB,HARRY D	FP
WEISS,LOUIS LLOYD	AN
WHITAKER,JACK DAWSON	PTH
WILDER,GORDON BOTKIN	IM
WILKINSON,ROGER LEWIS	FP
WILLIAMS,FRANCIS M	IM
WILLIAMS,ROBT D	FP
WILLIAMS,ROBT H	GS
WOODALL,JOHN WESLEY	FP
WOODBURY,CLARENCE R	ORS

MARSHALL COUNTY MEDICAL SOC

BOWEN,OTIS RAY	GP
BURKET,CECIL R	GP
CONNELL,VACTOR O	FP
COURSEY,JAMES O	FP
DE JESUS,JOSE R	CD
DEERY,MICHAEL FRANCIS	FP
FRANCE,LLOYD CAROL	GS
GUILD,J KENT	FP
HAMPTON,JAMES NICHOLS	FP
HOLM,BYRON MARSH	US
KLEMME,JOHN WM	FP
KOVACH,DREW ANTHONY	FP
KUBLEY,JAMES DANL	FP
KUBLEY,JAMES DUANE	FP
PETERSON,RONALD L	FP
REISS,WARREN K	FP
RIMEL,JAMES FLOYD	GS
ROBERTSON,JAMES STEWART	FP
SCHREINER,JOHN EDWARD	FP
STINE,MARSHALL E	FP
SWIHART,JOHN JACOB	PTH

MIAMI COUNTY MEDICAL SOCIETY

BALUYUT,AMANDO L	U
CRATES,GORDON COLVIN	FP
DE LEON,EDILBERTO S	AN
DUNCAN,JAMES E	PTH
FARAG,RAFIK S FOUAD	GS
FERRARA,DONALD WM	SJ
FERRARA,SAML J	GS
GATZIMOS,CHRISTOS D	PTH
GUTHRIE,JAMES U	GS
HILL,LLOYD LEOHN	FP
HO,CHI-YUN	US
MALOUF,STEPHEN DAVID	OS
RENDEL,HAROLD EUGENE	FP
REYES,DIEGO CASTOR	FP
ROBERTS,DANIEL B	GS
SIXBEY,MAURICE DEAN	FP
SNYDER,PARKER W	FP

MONTGOMERY COUNTY MEDICAL SOC

ALEXANDER,STEPHEN J	OPH
BAHLER,DEAN R	OM
BAIRD,MALCOLM KEITH	FP
BENJAMIN,SAMSON ADAM	OBG
BYLLESBY,JOYCE ELAINE	PTH
DAUGHERTY,FRED NEWTON	FP
DAVIS,WM HENRY	P
DODDS,WEMPLE	R
EGGERS,RICHARD ROY	FP
FOLTZ,JACK LLOYD	OBG
GARVISH,JOHN FRANKLIN	R
HOWLAND,CARL BRUCE	FP
KINDELL,HURSCHELL D	FP
KIRTLEY,JAMES MARION	OBG
LUDWIG,PAUL EDWARD	OPH
MILLIS,SAML CLARK	FP
PATRON,LEONARDO A	AN
PEACOCK,NORMAN F	OTO
PERALTA,JOSE	GS
RICHARDS,EDGAR ELVIN	FP
SHANNON,WESLEY EUGENE	FP
STEPHENS,JAMES PICKARD	FP
THOMPSON,CLAUDE N	FP
VIRAY,VICTORIANO G	GS
WARBINTON,FRED PHILLIP	FP

MORGAN COUNTY MEDICAL SOCIETY

ALARCON,ARCADIO M	IM
BARTELL,GARY DENNIS	P
BAURLEY,JAMES R	PD
BEESLEY,ROBERT C	IM
BRUBECK,ROBT EUGENE	GP
DRAKE,ELLERY THEODORE	
EISENBERG,DAVID A	FP
GAYLORD,THOMAS G	OBG
GRAY,LEON	IM
GRAY,WARREN LEE	U
HARDIN,STEPHEN LEE	FP
HEAVRIN,JOHN SLOAN	OBG
JONES,WM HOWARD	FP
KENDRICK,WM M	U
LAKE,MARJORIE E BAURLEY	PD
LEE,RANDALL A	IM
MILLER,RAY DONALD	FP
MILLER,ROBT JOHN	FP
OSTHEIMER,GEO JAMES	FP
REYNOLDS,JOHN L	ORS
STEELE,LOWELL R	CRS
TUASON,LEONORIO BERSAMIN	GS
TURNER,MAURICE A	FP
VAN WIENEN,JOHN	FP
WILSON,OLIVER R	FP
WINTER,WM PERRY	FP
WITHAM,RICHARD STEVEN	GS

NEWTON COUNTY MEDICAL SOCIETY

DIAL,FREDDIE P	DIA
GAMBOA,ELPIDIO L	END
GUZMAN,MARCELINO F	FP
JARDENIL,ROMULO S	FP
KRESLER,LEON E	FP
PARKER,JOHN CARL	FP
SCHOONVELD,ARTHUR	FP
SHOEMAKER,RUSSELL	US

NOBLE COUNTY MEDICAL SOCIETY

BOWMAN,CHAS M	GS
BRYAN,ROBT EUGENE	GP
CHANDLER,JAMES DUNCAN	FP
FIPP,AUGUST LORENZ	FP
FITZKEE,WM ELWOOD	FP
GREENLEE,JOS ALAN	GS
HEPNER,HERMAN	FP
HOOKER,DONALD J	FP
MESSER,FRANK WILBURN	FP
PATEL,MANUBHAI P	GS
RAMSEY,JOHN EDWARD	FP
SNEARY,MAX EUGENE	FP
STALLMAN,CARL F	FP
STONE,ROBT CHAS	FP

ORANGE COUNTY MEDICAL SOCIETY

COLLIER,JOHN WM	FP
GRABER,RICHARD	FP
HAGAN,MARION LUTHER	FP
HODGIN,PHILLIP THOS	FP
MC CALLA,CHAS X	FP
MOSEMANN,LUKE B	FP
NOFZIGER,TERRY LEE	FP
SCHOOLFIELD,WM EARL	FP
SHELLENBERGER,WALLACE A	P

OWEN-MONROE COUNTY MEDICAL SOC

ABRAM,ROBT MICHAEL	IM
ANDERSON,WM ROBBLEE	OBG
BAXTER,NEAL E	IM
BELLIS,STEPHEN LAWRENCE	R
BIDNEY,EVELYN BRESLIN	GP
BINTASAN,SUNIDA	P
BISHOP,MICHAEL DARYL	EM
BOMBA,BRAD JOS	GP
BOOZE,JAMES H	ORS
BORLAND,RAYMOND MILTON	PH
BRAUN,MARK W	
BROWN,ARLIN EDWARD	P
BROWN,MARCEL SINCLAIR	GP
BUCK,RODGER LEWIS	GP
BUCKINGHAM,RICHARD E	GP
BYRNE,DAVID ALLEN	D
CAMPBELL,WM THOS	AN
COFIELD,DONALD DEAN	OPH
COONS,FREDERICK WM	P
CRANE,DAVID GOODRICH	P
CREEK,JEAN A	IM
CRON,WM JAMES	D
CURETON,EDWARD ERVINE	P
CUTSHALL,WILLIAM D	
DALTON,NAOMI LUCILLA	OS
DOSTER,STERLING EUGENE	ORS
DUKES,RUSSELL JAMES	TS
ELLIS,CHAS ROBT	PTH
EMERY,CHARLES B	ORS
ESTES,AMBROSE C	GS
FARMER,CHAS ROBT	FP
FARR,JAMES CURRY	IM
FERGUSON,JAMES F	OR
FOWLER,RICHARD ROSS	FP
FRASURE,JAMES SCOTT	EM
FUGELSO,ERLING SVERRE	IM
GANJI,NASSER	AN
GEIGER,DILLON D	OTO
GOREN,MARK	
GRIFFITH,JOEL HAROLD	P
HABBE,TIMOTHY ALAN	U
HADDAWI,RAJIH Y	ORS
HAMMER,JAY WM	R
HENRICH,CARTER F	IM
HIBNER,KERMIT QUENTIN	FP
HOLTZCLAW,DAVID LESLIE	PD
HOLTZMAN,PAUL WM	IM
HOWARD,JAMES THOS	OBG
HOWARD,WM FRANK	OBG
HRISOMALOS,FRANK N	FP
ILLMAN,DWAIN CLARK	EM
JASTREMSKI,CHESTER A	FP
JOHNLOZ,DAVID KEITH	IM
JOHNSON,MICHAEL LEWIS	P
LA FOLLETTE,JAMES WARREN	FP
LEE,RICHARD V	OS
LEWALLEN,STEVEN ISAAC	FP
LEWIS,GEO NORWOOD	IM
LEY,GLEN DAVID	IM
LINDSEY,ROBERT LEE	AN
LINK,WM C	FP
MACATANGAY,EDELINO L	FP
MANIFOLD,HAROLD MORRIS	FP
MATHER,GLENN BURTON	NM
MATTHEWS,LELAND RAY	OBG
MC CLARY,CHAS WENDELL	FP
MC INTIRE,CLARENCE R	R
MEGREMIS,THEODORE L	R
MIDDLETON,THOS O	PD
MILAN,JOS F	GS

OWEN-MONROE COUNTY MEDICAL SOC

MITCHELL,JAMES PAUL	AN
MORFORD,GUY	AN
NICE,WM ARCHIE	FP
ONG,PRIMITIVA R	P
OWENS,LOUISE	GE
OWENS,RICHARD LEE	IM
OWENS,WALTER LEE	OBG
PIZZO,ANTHONY	PTH
PLESS,JOHN EDWARD	PTH
POOLITSAN,GEO CHRIS	IM
PUGH,WM ROBT	OTO
RAK,RICHARD ALAN	NS
RAMSEY,HUGH SMITH	FP
RATTS,LARRY DEAN	FP
RAY,JAMES ANTHONY	FP
REIMERS,ROGER ALLEN	R
REZVAN,NADER	AN
RICHEY,ROBT WM	OBG
RIEGER,IRWIN TAYLOR	U
RINK,LAWRENCE DONALD	IM
ROLLINS,THOS K	FP
ROSE,ROBT E	FP
ROSS,BEN RICHARDSON	OS
RUFF,JERARD GOEKE	PD
SCHAFFER,JAMES JOHANNES	PD
SCHECHTER,JOHN STEPHEN	PD
SCHELL,HARRY RICHARD	OBG
SCHILLING,RICHARD J	GS
SCHMALZ,WM JUSTIN	IM
SEAGLE,WM COURTNEY	ORS
SHAHBAHRAMI,FARROKH	GS
SHARP,THOS WAYNE	FP
SIBBITT,JOS WM	OTO
SILBERT,MICHAEL ZALMAN	GS
SMITH,HERSCHEL S	OPH
SNYDER,CLYDE REID	P
SOMERS,ALAN BROUNELL	N
SPENCER,BEAUFORT A	A
STAFFORD,JONATHAN T	R
STANGLE,WM J	R
STEARLEY,JOHN S	FP
SURIAN,MICHAEL ANDREW	U
TANNER,MARTHA H	IM
TINIO,WILFRIDO MORA	AN
TOPOLGUS,JAMES N	GS
TOPOLGUS,JAMES N	OBG
WALKER,ROBT MURRAY	EM
WAY,JAMES ALFRED	OPH
WEBER,WILLIAM E	PS
WELLS,BARBARA D	IM
WENZLER,PAUL JORDAN	FP
WHITE,JOHN PHILIP	OTO
WISEN,MARK	N
WRENN,RDBT EMMETT	OBG
YOUNGMAN,JAMES DOUGLAS	P

PARKE-VERMILLION CO MED SOC

ALEXANDRESCU,GHEORGHE	OR
BLOOMER,RICHARD SAML	GP
BRITTON,WELBON DUNLAP	GP
DWYER,DANL JOS	US
EVANS,FREDERICK J	FP
FELICIANO,ELPIDIO G	AN
FELL,ROBT M	FP
GUHA,DURGA DAS	GS
HERZBERG,MILTON	FP
KEMPF,GERALD FIDELIS	IM
MONTECILLO,ANTOLIN M	FP
NICHOLAS,THOS DAVID	US
SOMERVILLE,JOHN WM	EM
SWAIM,J FRANKLIN	FP

PERRY COUNTY MEDICAL SOCIETY

BUSH,HARGIS ROBT	GP
GILBERT,ROBT G	OR
LOHOFF,LEWIS C	FP
NEIFERT,NOEL L	FP
RESS,GENE EDWIN	FP
SMITH,FRED	GS
WARD,ROBT ANDERSON	FP

PIKE COUNTY MEDICAL SOCIETY

HALL,DONALD LURVE	FP

PORTER COUNTY MEDICAL SOCIETY

ALTUNA-RAMIREZ,RAQUEL	AN
ALVAREZ,PAUL	ORS
ARMALAVAGE,LEON J	ORS
AZAR,GEO ALFRED	PTH
BABCOKE,GARY ALLEN	GP
BARROS,PAUL R	OPH
BEHREND,FRANK LUDWIG	OBG
BEJEC,LOUIS C	OPH
BLACK,KENNETH A	FP
BLANDD,ULDARICO BRINGAS	R
BROWN,JAMES RICHARD	U
COHEN,HYMAN LEWIS	N
COVEY,THOS JAMES	PD
COVINGTON,CONSTANCE JOAN	FP
CRISE,JOHN ROBT	FP
DAVIS,CARL MARLOW	FP
DE GRAZIA,EUGENE JOS	GS
DELUMPA,RUSTICA Y CARLOS	PD
DELUMPA,VINCENTE PALMA	U
DITTMER,JACK EDWARD	FP
DITTMER,THOS LYLE	GS
DONAUER,ROBERT M	IM
DY,JAMES T	FP
DY,JULEY TEMBRINA	FP
EVANS,DANL RICHARD	OPH
FARAHMAND,FIROUZ	PD
FORCHETTI,JOHN ANTHONY	CD
FRANK,JOHN RAY	OPH
GALLINATTI,JOHN JOS	FP
GATES,GEO GREGORY	PTH
GOLD,MARVIN E	ORS
GORDON,JAMES DAVID	D
GORDON,JOS LESTER	FP
GREEN,LEONARD JUDSON	FP
GRIFFIN,CHAS G	GS
GRIFFIN,JOS PATRICK	A
HALL,THOS CHAS	FP
HANSEN,NIKOLAS FORBES	FP
HOHAM,FREDERICK DIXON	FP
HOLWERDA,HARRY LEE	FP
HULL,JOEL IRVIN	FP
JAHNS,ALBIN A	ORS
KILMER,WARREN L	GS
KIMMEL,LOUIS EDMUND	GS
KINGMA,ROY ELMER	FP
KOBAK,ALFRED JULIAN	OBG
KOENIG,ROBT LOUIS	FP
KU,MARSHALL JU-CHUAN	PD
LAI,NAN YER	OBG

PORTER COUNTY MEDICAL SOCIETY

LANDS,ROBT MASON	FP
LAW,YU HONG	GS
LEE,ROBT YING	FP
LUCAS,OWEN HERBERT	FP
MAKOVSKY,THEODORE	FP
MALAYTER,JAMES A	ORS
MASSUDA,YACOUB	AN
MC CLURE,CLARK T	FP
MOAYAD,CYRUS	OTO
NIKSCH,WM LOUIS	FP
O'NEILL,MARTIN JAMES	OS
OLSON,L DALE	ORS
ONG,TIONG GIOK	FP
OSTER,JACK H	P
PANGAN,ZANITA S	OBG
PATHEJA,SURJIT SINGH	OR
PETERSON,ALLEN LELAND	EM
PONCHER,JOHN ROBERT	PD
PORACKY,BERNARD F	R
RABELO,JOHN SEGUNDO	AN
READ,JOHN E	OPH
RHODES,RONALD NESBITT	PD
RIORDAN,JOHN F	AN
ROBERTSON,WM CARL	AN
SACRIS,MARIA ORCHID M	OBG
SALBERG,LARRY MICHAEL	N
SCHEIMANN,LOIS A GRIEDER	A
SHERRITT,WALLACE W	OBG
SHEVICK,ALEXANDER	OBG
SHIELDS,DUNCAN MC ELROY	OM
SISON,EDUARDO VENTENILLA	FP
SORKIN,SHEILA W	FP
STOLTZ,ROBT M	FP
STURDEVANT,FRANK MOXLEY	OBG
SUN,CHEN TUNG	GS
SWARNER,JOHN L	IM
TAYLOR,JAMES EDWARD	FP
TETRICK,ELBERT L	OM
TUFEKCIOGLU,ERDOGAN	R
VERDE,HORACIO V	P
WOODWARD,WM M	IM
WU,STEWART CHIU HAO	GS
YLAGAN,LUIS B	AN

POSEY COUNTY MEDICAL SOCIETY

BOREN,PAUL RANDOLPH	US
CRIST,JOHN R	FP
HIRSCH,HERMAN L	FP
ROPP,HAROLD EDWARD	FP
VOGEL,GORDON ALLEN	IM
VOGEL,LAWRENCE JOHN	FP
WOODS,ARBA LEONARD	OS

PULASKI COUNTY MEDICAL SOCIETY

HALLECK,HAROLD JEROME	FP
HEINSEN,CHAS EDWARD	FP
HOLLENBERG,EDWARD L	FP
JOHN,K THOMAS	IM
THOMPSON,WM R	FP
TSENG,CHE-LU	GS

PUTNAM COUNTY MEDICAL SOCIETY

BLACK,THOS HOUSTON	FP
DETTLOFF,FREDERICK R	FP
ELLETT,JOHN	FP
GLOCK,HUGH EDWIN	GS
HAGGERTY,FRED EMMETT	FP
JOHNSON,JAMES BASHFORD	FP
LARKIN,GREGORY NEIL	US
MACY,WARREN LEE	US
MARVEL,ROBT J	IM
ROOF,ROGER SAML	FP
SCHAUWECKER,CLEON M	GS
SMITH,A WILSON	IM
VEACH,LESTER WARDLAN	FP
VEACH,RICHARD LESTER	FP
VIEIRA,JOSE THOS	FP
WISEMAN,EARLE VANNOY	GS

RANDOLPH COUNTY MEDICAL SOC

CHAMBERS,CAROL RUDOLPH	FP
CHAMBERS,LEROY BAKER	FP
DININGER,WM STRAUGHN	FP
KOCH,HOWARD W	FP
LEAHEY,JEROME MARTIN	FP
MIRANDA,CONRADO R	GS
PAINTER,LOWELL WALTER	ABS
PHIPPS,LELAND K	FP
PORTER,ROBT A	FP
PYLE,SUSAN K	FP
REID,ROBT WM	OS
SHALLENBERGER,HENRY R	FP
SLICK,CRYSTAL RAY	FP
SPARKS,PAUL WIN	GS
THARP,DONALD W	OPH
VILLA,FLORENCIO CASTILLO	GS
WAGONER,BILLY D	FP
WHITE,HARVEY E	FP

RIPLEY COUNTY MEDICAL SOCIETY

DAFTARY,ALI AKBAR	IM
GARCIA,MANUEL GENETA	GS
HANSEN,J MICHAEL	FP
JAOJOCO,ARMANDO E	FP
LE BEAU,THOMAS E	FP
LIBUNAO,ARTEMIO SANTOS	FP
MC CONNELL,WM CHAS	FP
PARAS,JOSE LINGKOD JUANE	FP
ROW,GEO SAML	FP
WARN,WM JOHN	FP

RUSH COUNTY MEDICAL SOCIETY

ATKINS,CLARENCE C	OTO
CONNERLY,PATRICK WM	FP
CORPE,KENNETH F	GS
DEAN,DONALD IRVIN	OPH
ELLIS,DAVIS W	FP
GREEN,FRANK HAROLD	FP
KYLE,TERRY J	IM
MC KEE,HARRY G	FP
MC NABB,RICHARD C	CHP
MORRELL,DOUGLAS	FP
NUTTER,WYNDHAM HUNT	FP
REYES,ORDONIO J	GS
SHEETS,CHAS E	FP
WORTH,CLARENCE W	FP

ST JOSEPH COUNTY MEDICAL SOC

ADDIS,HOWARD MICHAEL	GS
AIGOTTI,RONALD ERNEST	HEM
ALLEY,TERRY L	FP
ANDERSON,STEPHEN LEE	IM
BACKS,ALTON J	OR
BANKOFF,DAVID LAWRENCE	ORS
BARAN,CHAS	NS
BARONE,CARMELO VICTOR	GP
BARTSCH,HARVEY LEONARD	U
BAWAB,M SAMIR	R
BEACH,NORMAN F	R
BECHTOLD,DAVID LEE	GS
BECHTOLD,SAML E	OBG
BELL,HORACE D	GP
BENNETT,JENE R	PTH
BERKE,ROBT D	A
BLUMENTHAL,ELLIOT JAY	FP
BLUTH,STEVEN ALAN	OPH
BODNAR,LESLIE M	ORS
BOOTH,FRANKLIN M	PS
BRANDEWIE,PILAR R NACU	P
BRECHTL,HARVEY J	GP
BRICKER,JANICE MARIE	
BROWNE,THOS KELLER	PUD
BUCK,RICHARD CRAIG	FP
BUTTS,MILTON A	FP
BYLER,JOHN J	FP
CARPENTER,PRAMOD K	PTH
CARTER,F R NICHOLAS	PH
CASSADY,J VERNAL	OPH
CASSADY,JOHN RUE	OPH
CHAMBERLAIN,DONALD S	R
CHAMBLEE,ROLAND W	FP
CHO,HUN-KOO	OBG
CLARK,WM HEMENWAY	OTO
CLAYTON,DAVID LEE	FP
CLINE,KENNETH LAMAR	FP
CONROY,MICHAEL DENNISON	FP
COOK,DEAN L	R
COOK,GORDON C	OBG
COX,ALFRED CHARLES	FP
CREASSER,CHAS WM	AN
CULBERTSON,KENNETH LEE	PD
DAVIS,EDWARD ANDREW	FP
DE STEFANO,MICHAEL JOS	OBG
DEAN,FREDERICK KENNETH	R
DEARDORFF,DALE DENNIS	FP
DENHAM,ROBERT H	ORS
DEVETSKI,ROBT LLOYD	IM
DINGLEY,ALBERT F	ORS
DODD,ROBT DARR	FP
DOLEZAL,BERNARD J	FP
DRUMMOND,JAMES A	PTH
DUNFEE,THOS PATRICK	NEP
DUNLAP,DAVID L	IM
EADES,R CHAS	P
EDWARDS,BERNARD ELMO	AN
EGAN,SHERMAN L	IM
ENGEL,HOWARD ROBT	IM
ENGLISH,JOHN PAUL	IM
ERICKSON,GUSTAF W	PD
FARNER,JAMES E	GE
FEFERMAN,MARTIN E	NS
FELDMAN,MAX	FP
FENSTERMACHER,ROBT EDWIN	FP
FERLIC,FREDERICK JOHN	ORS
FILIPEK,WALTER JOS	FP
FINK,JAMES MAURICE	IM
FIRESTEIN,RAY	IM
FISH,EDSON CLEMENT	AN
FOLEY,HANSEL ODELL	FP
FORREST,OTTO NORMAN	OBG
FRANK,HERBERT	IM
FRANK,LYALL LOUIS	FP
FRASH,DE VON WALTERS	FP
FRIEDMAN,MORRIS S	ORS
FRIEND,GEO BERNARD	GS
FRITH,LOUIS GORDON	FP
FROMM,GARY BRIAN	PUD
GABLE,STEVEN ROBERT	NEP
GABRIEL,MAGDI	ORS
GALUP,LUIS NEMESIO	PTH
GANSER,RALPH VINCENT	OTO
GANSER,RICHARD A	EM
GARDNER,IAN ROSS	CDS
GATES,GEO E	IM
GERGESHA,EDWARD ALEX	PD
GERIG,ELDON LAVERN	GS
GIBSON,MILTON EUGENE	CD
GILMAN,MARCUS MANDLE	OS
GODERSKY,GEO EDWIN	OBG
GODERSKY,LOIS GARNET S	PTH
GRAF,JOHN PAUL	AN
GRAINGER,JAMES LEWIS	R
GREEN,GEO F	GS
GREEN,GEO RICHARD	GS
GREEN,JAN C	U
GREEN,NORVAL E	U
GRILLO,DONALD	CRS
GRUSZYNSKI,THOS RALPH	
HA,YOUNG JAE	AN
HAHN,JOHN JOONYONG	AN
HALEY,GEO MATSON	U
HALEY,PAUL EDWARD	GS
HALL,JAMES MALCOLM	OPH
HAMILTON,CHAS O	AN
HARDING,JOHN SCOTT	OR
HARMAN,ROBERT E	PTH
HARRIS,C GLENN	P
HARTSOUGH,RALPH I	EM
HATHWAY,STEPHEN DALLAS	PTH
HAUGSETH,ELLSWORTH K	ORS
HELLER,EARL JOS	ORS
HELMER,JOHN FRANCIS	GS
HEYDE,EDWARD LEE	OPH
HILBERT,JOHN W	OS
HILDEBRAND,JOHN O	FP
HILL,WALLACE CLARK	GS
HILLMAN,MARION W	FP
HOLDEMAN,LILLIAN SCHEIB	PH
HOLDEMAN,RICHARD W	IM
HOLLOWAY,RICHARD JAMES	U
HOLTZMAN,NORMAN N	IM
HORVATH,GEO ALEXANDER	PD
HORVATH,JOHN LOUIS	TR
HOUSER,DEWARD S	OBG
HOUSER,KEIM THOS	OBG
HOW,LOUIS EUGENE	GPM
HOWARD,PAUL FREDERICK	CD
HUNT,ROBERT N	IM
HUSSEY,LAWRENCE KENT	PTH
HYDE,CARROLL C	U
JANKOWSKI,ERNEST BERNARD	FP
JENKINS,JOHN L	CD
JUREZIZ,RONALD EDWARD	GS
KARN,JOHN W	AN
KEENAN,PATRICK JUSTIN	N
KENNEDY,MACHIEL NEIL	FP
KIEHM,TAE GEE	IM
KIM,BUM JOO	OBG
KING,ROBT PRESTON	FP
KLETZING,DANL WAYNE	OTO
KNODE,KENNETH THOMSON	A

ST JOSEPH COUNTY MEDICAL SOC

KRIZMAN,DAVID JOHN	AN
KRUEGER,JOHN EDWARD	AN
KUHN,FREDERICK LEE	OM
LAMB,J LEONARD	OBG
LANDGRAF,JOHN WM	PTH
LANE,WM HENRY	AN
LAVELLE,THOS FRANCIS	PUD
LEIPOLD,JON DAVID	P
LEVATIN,BERNARD I	U
LIONBERGER,JOHN R	R
LISS,EMANUEL C	D
LOCKHART,PHILIP BRUCE	R
LUZADDER,JOHN E	FP
MAC DONELL,ELORED HUGH	IM
MACIAS,RAFAEL	COS
MACRI,PAUL ANGELO CARL	FP
MAGNUSON,CHAS W	GE
MAHANK,CAMIEL CYRIEL	OBG
MARQUIS,GORDON	OTO
MARTIN,CHAS F	R
MARTINOV,WM EDWARD	CDS
MAUZY,MERRITT C	PS
MC CRALEY,WM J	FP
MC DONALD,EUGENE W	IM
MC FARLAND,CORLEY B	OPH
MC MEEL,JAMES EUGENE	OM
MC QUADE,JOHN ALLEN	FP
METCALFE,GRANT EMORY	P
MEYER,STEVEN M	OPH
MILLIGAN,SAML LYMAN	IM
MITCHELL,GARY ALAN	NEP
MUELLER,HILBERT MARTIN	D
MURPHY,JOSEPHINE F	FP
MYERS,CHAS EDWIN	FP
MYERS,GERALD PAUL	FP
MYERS,PHILIP ROBT	OS
NAPPER,KARL FRANK	AN
NAVAL,JOVENTINO CRUZ	FP
NEHER,JOHN LEWIS	FP
NELSON,FRANCIS DALE	FP
NELSON,RAYMOND E	FP
NELSON,ROBERT R	FP
NORBORG,CHRISTOPHER S	OBG
O'DEA,PATRICK JOHN	GE
O'MALLEY,PATRICK FRANCIS	OPH
ODRCIC,KAZIMIR JURAJ	OPH
OLSON,DONALD T	CD
OLSON,KENNETH L	R
ORR,W ROBERT	ORS
PAIRITZ,FRANK DAVID	R
PARSONS,ROBT LA RUE	ORS
PASCUZZI,CHRIS A	PTH
PETERSON,CHAS EDWARD	CDS
PETRASS,ANDREW	FP
PHELPS,STEPHEN ROWLES	D
PLAIN,GEO L	IM
PLAIN,GEO	GS
POULIN,THOS LOVELAND	
PRIMUS,ROMANA R	A
PROUDFIT,CHAS H	GYN
PYLE,HAROLD D	PD
QUINN,MICHAEL GERALD	PTH
RABASA,RAFAEL	FP
RASMUSSEN,RUTH FRANCES	PTH
REED,ROBT F	FP
REIDY,JAMES EDWARD	
REINEKE,JAN RICHARD	OBG
RICE,KATHERINE KEMPNER	P
RICHARDS,DEAN ALLEN	FP
RIGAUX,ARMAND JULES	FP
ROBERTS,BILLY JOE	FP
ROHRER,BRYCE BARTON	FP
ROSENHEIMER,GEO MILTON	AN
ROSENWASSER,JACOB	IM
RUBENS,ELI	PDA
RUBUSH,JOHN LANCE	TS
SAINE,BRIAN DAVID	OTO
SALAZAR,LUIS BARBA	GE
SANDERSON,ROBT BURNS	PUD
SANDOCK,LOUIS F	IM
SANDOCK,MARK STEVEN	IM
SANDOZ,HARRY H	FP
SARNAT,WM STEWART	CD
SAUCELO,BARTOLOME M	FP
SCHAPHORST,RICHARD A	OBG
SCHILLER,HERBERT A	IM
SCHLOSSBERG,VICTOR E	GS
SCOTT,FRANK M	CRS
SCUZZO,VINCENT C	FP
SELLERS,FRANCIS M	OBG
SHARP,MERLE CALVIN	FP
SHELLEY,EDWARD S	OBG
SHRIBER,WM HOWARD	P
SHRINER,RICHARD LEE	D
SKILLERN,SCOTT D	D
SMITH,DONALD WAYNE	OPH
SMITH,LEE	ORS
SOBOL,ZBIGNIEW W	FP
SPALDING,DAVID LEE	FP
SPALDING,WENDELL L	FP
STAUNTON,HENRY A	IM
STETTBACHER,LYNNE LEE	FP
STIMSON,HARRY RENNER	FP
STOGDILL,WM J	FP
STOLL,CHRISTINE A LARSON	FP
STOLLER,HARRY JOE	PM
STRATIGOS,JOS SPYRIOON	IM
STRINGER,DRENNON DURWOOD	AN
STRYCKER,DEAN LA MAR	PD
SWEENEY,ROBT MUROL	FP
TAPLEY,DWIGHT L	OPH
THOMPSON,JOHN M	AN
THOMPSON,LARRY GENE	FP
THOMPSON,ROBT ARTHUR	R
THORNTON,MAURICE JOHN	R
TIRMAN,WALLACE S	HEM
TROEGER,THOMAS ALBERT	ORS
TROYER,MARLIN L	CDS
TUTUNJI,NERMIN OJAMIL	P
URRUTI,ARNOLDO HORACIO	FP
VAGNER,SAML BERNARD	N
VAKKUR,GEO JURI	CDS
VAN FLEIT,WM EDMUND	FP
WACK,JAMES EDWARD	AN
WAKELAND,DAVID ROLLIN	U
WALERKO,FRANK	AN
WALKER,EDWIN MERCER	GS
WALTERS,CHAS EDWARD	P
WEHLAGE,DAVID FRANCIS	GS
WHITLOCK,MERLE E	IM
WILHELM,AGATHA M	OPH
WILLS,MARTYN ALLAN	OBG
WILSON,DOUGLAS JAMES	GS
WILSON,JAMES M	DR
WIND,JOS LEON	OPH
WIXTED,JOHN FRANCIS	OPH
WIXTED,JULIA M LUNDSTROM	ORS
YERGLER,WILLARD G	FP
ZEIGER,IRVIN LEWIS	

SCOTT COUNTY MEDICAL SOCIETY

BACALA,JESUS C	GP
CASTRO,IGNACIO B	GS
DANCEL,MANUEL TOMAS	FP
HAICK,EDWARD	R
KHO,EUSEBIO C	GS
MC CLAIN,MARVIN LEVI	FP
ROBERTO,BENJ V	FP
SCOTT,WM MOUNT	FP

SHELBY COUNTY MEDICAL SOCIETY

ABELEDA,LAMBERTO VILLAS	IM
ARATA,LUCIAN ALPHONSUS	GP
BANGUIS,ELISEO TAMOLA	GS
BANGUIS,LUCIA PASILABBAN	IM
DALTON,WILSON L	FP
DAVIS,JOHN ALEXANDER	FP
DEUPREE,WM DWIGHT	PD
GOLDYN,RICHARD ALAN	ORS
INLOW,PAUL MARTYN	R
INLOW,ROBT PIERSON	GS
INLOW,WM D	GS
JEAN,THOS A	FP
LORBER,JAMES MICHAEL	GS
MILLER,RICHARD CHAS	FP
MOHEBAN,JOS	FP
SCOTT,V BROWN	IM
SILBERT,DAVID B	FP
THURSTON,FLOYD EDWARD	R
TOWER,JAMES H	FP
WHITCOMB,ROGER F	FP
ZEGARRA,R F	EM

SPENCER COUNTY MEDICAL SOCIETY

GLACKMAN,JOHN CLAY	FP
MONAR,MICHAEL O	FP

STARKE COUNTY MEDICAL SOCIETY

DE NAUT,JAMES F	FP
FRITZ,WALTER	FP
GOODE,ROBT JAMES	FP
HENRY,HOWARD JENNINGS	GS
INGWELL,GUY BERNARD	FP
LEINBACH,EARL R	FP
MATTHEW,JOHN ROBT	GPM
SZALAY,LESLIE	US
UFKES,HERBERT	FP

STEUBEN COUNTY MEDICAL SOCIETY

BARTON,ROBT FRANCIS	GP
DAVIS,CLAUDE E	GS
HARTMAN,JOHN J	ABS
JACKSON,DEAN B	FP
KISSINGER,KNIGHT L	FP
LEE,CHONG SUNG	OBG
MASON,DONALD GOODING	FP
MATTOX,DEAN LLOYD	FP
RAUSCH,NORMAN W	FP
RICHARD,NORMAN FREDRIC	ABS
SCHREPFERMAN,WAYNE	FP
WATKINS,LARRY EUGENE	US
WEAVER,R WYATT	FP
WILLARD,RICHARD D	
YOCUM,PAUL STONE	GS

SULLIVAN COUNTY MEDICAL SOC

BEDWELL,MARION HADDON	GP
BROWN,JOHN STANLEY	GP
CROWDER,JAMES H	FP
DAUGHERTY,WM LOUIS	FP
DUKES,BETTY J DICKERSON	FP
DUKES,JOS ELLSWORTH	FP
ESKEW,KENNETH W	FP
MC CLURE,GLEN	GS
MC NIEL,KENNETH WAYNE	FP
SARKAR,ANIL K	
SCOTT,IRVIN HUDSON	GS
TAYLOR,JOHN RICHARD	FP

TIPPECANOE COUNTY MEDICAL SOC

ADE,CHAS HAMILTON	OTO
ADE,MARY EDITH KELLER	GP
ALDRICH,DAVID DOUDT	PTH
ALEXANDER,ALAN AMES	PD
ALSTOTT,DAVID FREDERICK	PTH
ARVIN,DELANO ZEUS	R
ASH,STEPHEN R	NEP
AUCKLEY,JAMES LEONARD	IM
BABB,FORREST J	GP
BAKER,JOHN R	AN
BALKEMA,CATHERINE M	GP
BEAVER,NORMAN EUGENE	FP
BECK,DAVID C	D
BEESLEY,RICHARD ROY	PD
BEUERMAN,VIRGIL ADOLPH	OPH
BLANDING,JAMES D	PTH
BLOCH,RICHARD	NEP
BOLIN,ROBT CORNWALL	IM
BOND,LARRY GENE	D
BOSLEY,ROGER EUGENE	OBG
BOUGHER,GERALD RAY	GP
BOURLAND,BARBARA JOHNSON	PD
BRADY,KINGDON	PTH
BRENNAN,THOS FRANCIS	OTO
BRIDGE,BARTON C	GP
BROWN,JOHN MICHAEL	OBG
BULLARD,HARLAN R	OPH
BURNS,JOHN T	PD
BUSH,JACK ARROWSMITH	AN
CARPENTER,JAMES BEDFORD	FP
CARPENTER,ROBT SCHOFIELD	EM
CARREL,FRANCIS EDSON	EM
CARROLL,BERTHA ROSE	OS
CARTWRIGHT,GLEN WILLARD	PD
CLINE,CHAS THEODORE	GE
CONWAY,LOUIS WM	NS
COYNER,ALFRED BRUCE	FP
DAVIS,GRAYSON B	FP
DAVIS,HOWARD B	U
DERHAMMER,GEO LEWIS	FP
DEUR,JULIUS JAY	IM
DONAHUE,GEO RICHARD	FP
DU BOIS,RAMON B	FP
EDWARDS,THOMAS A	ORS
ELLIOTT,PAUL W	PTH
EVANS,DAVID LESLIE	P
FERGUSON,WILLIAM B	ORS
FIELDS,DON C	GS
FILMER,ELEANOR H M JULIN	FP
FISHER,JAN HAROLD	AN
FLACK,RUSSELL ALLEN	IM
FREEMAN,MARK L	P
FREY,HARLEY H	AN
FRITCH,JOHN MARTIN	OPH
GISH,HOWARD M	OS

TIPPECANOE COUNTY MEDICAL SOC

GOSSARD,JOHN M	ORS
GRIPE,RICHARD PUTNAM	CD
GUTWEIN,GILBERT	ORS
HAAS,CHAS F	D
HANNEMANN,ROBT EARL	PD
HARDEN,MURRAY E	OBG
HARTER,ELI BLAIR	AM
HARVEY,BENNETT BROWN	PTH
HASS,CAROLINE E HALL	FP
HASS,THOS W	OBG
HEID,GEO J	FOP
HENSON,STEPHEN LLOYD	OTO
HORSWELL,RICHARD R	IM
HUGHES,ANSON F	OBG
HUGHES,RICHARD R	EM
HULL,JAMES EDWARD	GS
HUNSBERGER,WALTER G	R
HUNTER,DEAN MURRAY	OBG
JACOBSON,WM	PTH
JOHNS,JANET SUSAN	FP
JOHNSON,HERBERT S	GS
JONES,ANABEL RATCLIFF	AN
KAPLAN,JOSHUA M	PS
KARBERG,RICHARD JOHN	OBG
KELLEY,JACK LESLIE	GS
KEPLINGER,JAMES ELLIS	NS
KLATCH,BEN Z	IM
KLEPINGER,HARRY EDWIN	FP
KNOTE,JOHN ALTON	R
KOHNE,ROBT WM	FP
KRAUS,MAURICE D	R
KUIPERS,FRED MERRILL	CD
LAHR,RICHARD E	FP
LANDIS,CHAS BYRON	OM
LEMPKE,LLOYD WM	ORS
LIND,JAAP J	ORS
LIPP,STEVEN R	PD
LOOP,FREDERICK ADDISON	GS
MAC LENNAN,JOHN CALVIN	CD
MAIER,PAUL T	CD
MARKS,NORMAN S	U
MARSH,GEO WILBUR	FP
MARVEL,HOWARD ROLAND	A
MATHER,CHAS R	OBG
MATHER,ROBT LINCOLN	OPH
MATHEWS,FRANKLIN	N
MC ADAMS,HUGH BEST	FP
MC ADAMS,ROBT C	FP
MC EWEN,DAVID AIKIN	DR
MC FADDEN,JAMES M	PTH
MC KINLEY,JOS	U
MC KINNEY,DONALD LEROY	FP
MC PHERSON,RICHARD CLARK	GS
MENTZER,WM GILBERT	OBG
MILLER,ALBERT JOHN	PTH
MILLER,ROLAND EDWARD	PD
MILLER,WM JOS	R
MOHRS,PAUL EDWARD	AN
MOLSTAD,CLAY L	IM
MOUNT,WM MAXWELL	A
O'NEIL,PATRICK RAY	AN
ONORATO,JOS J	IM
PATRICK,EDWARD A	US
PATTON,CHAS NATHAN	AN
PEPPARD,RORY JON	PD
PEREZ,J MICHAEL	U
PEYTON,FRANK WOOD	OBG
PFROMMER,JOHN R	AM
PHELPS,JAMES MICHAEL	R
PICKERILL,JAMES MITCHELL	FP
PLANTE,MICHAEL T	OBG
POTTS,DAVID R	OBG
POULOS,JAMES THOS	END
RADCLIFFE,LEE EWING	P
RAHDERT,RICHARD F	CHP
RALSTON,MARC ALLEN	OPH
RAMSEY,GEO FRANK	IM
RATCLIFF,FRANK WM	AN
REMO,JOHN WM	DR
RIGGS,WENDELL A	PD
ROBINSON,FREDERICK CHAS	N
ROGGENKAMP,MILTON W	PTH
ROLLEY,RONALD T	GS
ROTHROCK,PHILIP WAYNE	IM
RUSCHLI,EDWARD BARNARD	FP
RUTHERFORD,CHAS E	GS
SCANLON,JOHN CHAS	PUD
SCHAAF,BERNARD J	U
SCHEERES,JACOB WM	GS
SCHMIEDICKE,PAUL HENRY	IM
SEARCY,LINDA MARIE	OS
SHARVELLE,D J	OPH
SHERMAN,DAVID EMERY	OBG
SHIVELY,JOHN L	ORS
SHOLTY,WM MAXWELL	AN
SKIDMORE,CHAS EDWARD	FP
SMITH,LOWELL CLINE	FP
SMITH,ROBT D	FP
SMITHERMAN,MARVIN L	
SONDGERATH,CLIFFORD JOS	FP
SPURLOCK,FAE HEDRICK	P
STAKEM,BRIAN EDWARD	R
STEELE,HUGH HENDERSON	GE
STOLZ,THOS J	FP
STRAYER,JOS WM	PUD
STUNTZ,EDGAR CHEADLE	P
TACKER,WILLIS ARNOLD	FP
TROUT,CARL JOS	OPH
TROUT,DAVID JOS	OTO
UNDERWOOD,GEO MAUZY	FP
VAN BUSKIRK,EDMUND L	OPH
VAN DEN BOSCH,WALLACE R	P
VAN KIRK,JOHN ROBT	FP
VERMILYA,ROBT WELSH	AN
WAGNER,LINDLEY HEATH	IM
WAGONER,J EDWARD	ORS
WAITS,CHESTER LA VERNE	FP
WEBSTER,PAUL L	DR
WEIDA,JERRY MAYNE	FP
WELK,GORDON DANL	FP
WELLER,RALPH DEAN	FP
WELLER,WENDELL A	OTO
WILLIAMSON,ROBERT T	OPH
WILMS,JOHN H	P
WOLF,GORDON C	OBG
WONG,NORMAN FRANCIS	FP
YEGERLEHNER,ROSCOE S	FP
ZAWADSKY,SARETTE CYNTHIA	IM

TIPTON COUNTY MEDICAL SOCIETY

BURKHARDT,BOYD ALONZA	ABS
CARTER,JEAN VAL	FP
COBB,CLARENCE M	PTH
COMPTON,GEO LEONARD	FP
ERICSON,HAROLD L	FP
GOSSARD,MEREDITH B	FP
HALLER,ROBT LEWIS	FP
KINCAID,RAYMOND KEITH	GP
KURTZ,ROBERT S	FP
LAMBERT,DESTRY WAYNE	IM

TIPTON COUNTY MEDICAL SOCIETY

MEREDITH,JESSE H	FP
STOUDER,ALBERT EDWIN	GS
TRANTER,WM FRANK	OS

VANDERBURGH COUNTY MEDICAL SOC

ADAMSON,WM ERNEST	PTH
ADYE,WALLACE MORGAN	GP
AKIN,EMEL BILGE	US
AKIN,NEVZAT	GE
ALEXANDER,JOHN EVAN	OPH
ALLEN,DONALD RAY	IM
ALLEN,WM H	NS
ANDERSON,MILTON H	P
ANTES,EARL H	IM
ARENDELL,ROBT E	GP
ARROYO,SYLVIA Z	AN
AUSTIN,EUGENE WM	PD
BAIRD,GLENN D	PUD
BAKER,RAYMOND C	PD
BAKER,SAMMIE BRUCE	R
BARNARD,ROGER LESLIE	FP
BARNHART,WILLARD T	U
BAUTISTA,AMANCIO G	AN
BECK,ROBT E	R
BECKER,JERRY DONNELL	IM
BEGLEY,JOS W	OTO
BEISEL,LARRY HOMAN	PD
BEMAN,JOHN W	OTO
BENDER,MARTIN JOHN	U
BENNETT,ABNER P	PTH
BERRY,GEORGE F	FP
BISSONNETTE,ROGER P	IM
BIZAL,JOHN ADOLPH	OTO
BLOSS,BRYANT ALLEN	ORS
BOHLING,JEFFREY LUKE	OBG
BOONE,ROBT D	TS
BOYLE,CARROLL L	GP
BRAKEL,FRANK J	IM
BRAUN,STEPHEN EARL	OS
BRITT,ROBT LEE	PD
BROWN,JAY ALBERT	FP
BROWN,RAYMOND LEE	AN
BRUNDICK,EDWARD L	ORS
BRYAN,STANTON L	IM
BUEHNER,DONALD CLEMENS	FP
BUEHNER,DONALD F	FP
BURG,HOWARD EDWIN	IM
BURGER,THOS C	GS
BURNIKEL,RAYMOND H	CRS
CABRERA,JUAN CABRERA	CHP
CARLSON,DAVID J	GS
CARLSON,RALPH FREDERICK	TS
CHALLMAN,WM BOWER	FP
CHAN,MACARIO ONG	AN
CHEEK,JACK ALLAN	PD
CHEN,TZENG-CHIH	IM
CHOW,PHILIP P	
CLARK,THOS W	IM
COBB,DONALD PITT	OBG
COLEMAN,JOS EDWIN	PD
COMBS,HERMAN TOW	FP
COMBS,JOHN HAROLD	AN
COMBS,RICHARD C	IM
CONNORS,JAMES J	PED
COOK,THOMAS LYNN	OR
COOPER,WALLER WALLACE	AN
CORCORAN,PATRICK J V	IM
CORDANO,ANGEL	NTR
COTTOM,DAVID LEE	IM
COWEN,	R
COX,LARRY LA VON	EM
CRANE,DAVID M	EM
CRAWFORD,JAMES HARVEY	FP
CRUDDEN,CHAS H	P
CULLNANE,CHRIS WALTER	GS
DAVIS,KENNETH DEYLEN	ORS
DE LA FLOR,EDUARDO	
DENTINO,MARIELLEN	NEP
DENZER,EDWARD K	FP
DENZER,WM OLIVER	FP
DESTACHE,DONALD JAMES	AN
DI ROBBIO,CARL C	ORS
DIECKMAN,HERBERT S	A
DIOTELLEVI,GARY H	FP
DODD,ROBERTS K	GS
DOWNER,LUTHER H	FP
DRAKE,DALE WILFRED	AN
DUKES,MICHAEL JOS	OBG
DYCUS,WALTER ARRINGTON	FP
EDWARDS,RODNEY D	OS
EFF,JACK S	PD
ELLIOTT,STEVEN K	FP
ELSHOFF,DONALD VIRGIL	IM
EMERSON,QUENTIN BRENT	US
ENGEL,EDGAR L	OBG
EVANS,O THOMAS	ORS
EVERS,PETER L	FP
EWER,ROBT WAYNE	IM
FARQUHAR,JOHN S	FP
FATTU,JAMES M	IM
FAW,MELVIN L	CD
FENNEMAN,ROBT J	OPH
FERGUSON,STEPHEN C	HNS
FIELD,THOS EMERY	FP
FISCHER,CHAS KENNETH	OPH
FITZSIMMONS,SAML LEE	U
FLAMION,PATRICK C	
FRANCO,JAMES MICHAEL	NS
FRANKLIN,JOS EDWARD	OBG
GAMBLE,JAMES EDWARD	HNS
GARLAND,EDGAR ALLEN	GS
GAUL,L EDWARD	D
GELLER,SAML	FP
GERLANC,MILAN D	ORS
GETTY,WM HAYES	IM
GIORGIO,DOUGLAS JOS	AN
GOURIEUX,EDWARD DE VERRE	FP
GRAHAM,NELSON VERE	OBG
GRIES,RICHARD LAWRENCE	FP
GRIESER,GERHARD MATTHEW	NS
GRIFFITH,STEVEN H	FP
GRIMM,WM CHAS HERBERT	IM
GUCKIEN,JOS LAWRENCE	OPH
HACHMEISTER,CHAS WM	FP
HAMMOND,R CASE	U
HARDESTY,WILLIAM P	IM
HARE,DANL M	U
HARGETT,ISAAC REYNOLDS	PD
HARMON,THOS MAITLAND	R
HARNED,BEN K	GS
HARRIS,ROBT LEE	FP
HARRIS,WM DUANE	AN
HARTLEY,CLARENCE A	FP
HARTZ,F MINTON	US
HASSEL,WALTER BETHEL	OBG
HAYES,THOS P	TR
HAZELRIGG,DONALD EDWIN	D
HEALY,CORNELIUS EDWARD	PD
HEIMBURGER,IRVIN LE ROY	TS
HEINRICH,JAMES	
HEINRICH,WESTON A	GS
HENDERSHOT,EUGENE L	R

VANDERBURGH COUNTY MEDICAL SOC

HERF,STEVEN MICHAEL	END
HERMANN,HAROLD WESLEY	OS
HERMAYER,STEPHEN	OPH
HERRELL,MICHAEL ALAN	PTH
HERRMANN,GORDON T	IM
HERZER,CLARENCE C	FP
HEUMANN,JOHN E	ORS
HIGDON,CHESTER FRANCIS	N
HIGGINS,JAMES LEMMON	FP
HILTON,FRANK LINDEN	OBG
HIMEBAUGH,GILBERT JOS	GS
HITCHCOCK,PHILIP DUDLEY	FP
HOBBS,ARTHUR A	R
HOBGOOD,JAMES LEE	AN
HODGE,DENNIS LEE	OBG
HOOD,TONY EUGENE	AN
HOOPES,JANE MAC LEOD	PD
HOOVER,J GUY	GS
HOOVER,MICHAEL B	GS
HOUSER,WM CHAS	IM
HUGGINS,VICTOR SPENCER	OBG
HUNTER,HARRY L	ON
HUUS,JOHN CHRISTIAN	U
JOHNSON,HAROLD VICTOR	FP
JOHNSON,STEPHEN LEE	IM
JOHNSON,WILLIAM F	GE
KANDUL,THOS STANLEY	PTH
KAUFFMAN,HARLEY MARLEY	P
KAYS,LARRY P	N
KESSLER,ROBT B	FP
KIECHLE,FREDERICK L	PTH
KIM,CHONG SOO	AN
KIMMEL,GEO EDWARD	AN
KINCAID,RICHARD WESLEY	FP
KINCAID,ROBT STEPHEN	AN
KIRICENKOV,GEORGE F	
KORBA,ALVIN	TR
KORN,ALLAN MICHAEL	IM
KREMZAR,MAX	
KRUEGER,THOS PAUL	NS
LAUBSCHER,CLARENCE A	FP
LAWLER,JOHN FIELDING	GS
LAWRENCE,JOSEPH C	ORS
LEHMANN,DALE ELBERT	END
LEIBUNDGUTH,HENRY	ORS
LESSURE,ALFRED P	R
LEWIS,MERRAL B	FP
LIM,YOUNG S	PTH
LINGE,CARL HARBOURT	DR
LONGSTAFF,JOHN PASCHAL	P
LOURIE,BERNARD	IM
LUTZ,LARRY WM	FP
LYNCH,HAROLD DUFF	HEM
MANNING,GEO WESTON	CHP
MARIENAU,DAVID J	FP
MARRESE,ROCCO A	ORS
MARTY,ALAN THOS	CDS
MARVEL,JAMES ANDREW	A
MASON,EVERETT ELMORE	FP
MATHEWS,JAMES R	R
MC CARTHY,JOSEPH CLARK	EM
MC CLURE,LARRY THOMAS	FP
MC COOL,JOE HENRY	P
MC COY,MELVIN HOWARD	P
MC DONALD,JOS DOUGLAS	GS
MC ELROY,ROBT JON	IM
MC KINNEY,KENT G	
MEYERS,MARK ELMER	FP
MILLER,LA VERNE BAXTER	FP
MILLER,MARSHALL S	IM
MILLER,MILTON JOHN	FP
MILLS,FRED EDWARD	PTH
MILLSAPS,RALPH D	IM
MINO,ROBT A	GS
MOK,LYNN CHANG	AN
MOK,YING BUNG	ORS
MOULTON,LILLIAN G	CHP
MULLICAN,WM STANLEY	CD
MURPHY,EDWARD U	OPH
NACHTNEBEL,KENNETH LOUIS	GS
NACINO,IRINEO MONJE	AN
NEWMAN,ALVIN EDWARD	OS
NEWMAN,KERRY JON	IM
NEWNUM,RAYMOND L	IM
NEWSOME,COLA KING	FP
NEWTON,ROGER EUGENE	OBG
NICHOLSON,RAYMOND WM	FP
NIEDERMAYER,ALFRED JOS	EM
NONTE,LEO ROBT	GS
NOVEROSKE,RICHARD JOHN	R
OAK,JOHN B	CD
OFFUTT,DOUGLAS CARTER	IM
OLSON,JEFFREY W	AN
OSWALD,ROBT HAROLD	OBG
PALMENTER,DOUGLAS SAMUEL	PD
PANFILI,CATHERINE ANN	IM
PASTOR,JULIUS WM	AN
PAVLICK,THEODORE JOS	OPH
PEDUK,MARIA A	FP
PEMBERTON,JACK JAMES	FP
PENKAVA,ROBT RAY	DR
PERCINEL,AHMET KEMAL	HS
PERKINS,JON C	OPH
PONTAOE,ALEJANDRO GARCIA	P
PORRO,FRANCIS WALTHOUR	PTH
PRESENT,JULIAN D	FP
PRICE,GERALD L	
PRICE,SHIRLEY G	GS
PULCINI,JOHN DENNIS	PS
RABIN,RONALD PHILIP	U
RADCLIFF,FORREST F	ORS
RANSDELL,ROBERT W	PD
RASH,JAMES R	OBG
RATCLIFFE,A WAYNE	PTH
RAZEK,ALY A	
REICH,CLARENCE E	FP
RENNE,JAMES WILLIAM	ORS
RIETMAN,H JEROME	P
RIPPERGER,STEVEN GREG	OBG
RITCHIE,WM DUDLEY	FP
RITZ,ALBERT SYLVESTER	GS
ROBERTSON,JAMES A	PTH
ROBINSON,LAYNE D	FP
ROBINSON,WILLIAM H	
ROE,TAFT WM	OTO
ROLD,JAMES F	R
ROMICK,BRUCE W	U
ROSENBLATT,BERNARD B	FP
ROTHENBERG,JERRY	PTH
ROYSTER,ROBT A	GS
RUDOLPH,KENNETH JACOB	OPH
RULE,NED PERRY	U
RUSCHE,HENRY J	FP
RUSCHE,HERMAN FREDERICK	GE
RUSCHE,THOS JEROME	N
SALAMA,FAWZY EL-SAYED	U
SARTORE,GILBERT ALLAN	FP
SAUL,GEORGE M	IM
SCHEN,SANFORD ELLIOTT	IM
SCHIMMELPFENNIG,ROBT WM	PD
SCHIRMER,ROBT H	FP
SCHNEIDER,CHAS P	FP

VANDERBURGH COUNTY MEDICAL SOC

SCHRIEFER,VICTOR V	FP
SCHROEDER,HENRY R	OBG
SCHULER,GRAHAM T	FP
SHEEHAN,E GREGG	OBG
SIEGEL,LYLE PHILLIP	AN
SIGDA,FREDERICK	IM
SIMS,LARRY WAYNE	EM
SINN,CHAS M	IM
SKAGGS,HOMER	EM
SLAUGHTER,HOWARD C	OPH
SLAUGHTER,JOHN C	D
SMITH,GORDON LANE	P
SMITH,HAROLD EARL	EM
SMITH,ROY MITCHEL	FP
SMITH,STEWART P	NEP
SNIVELY,WM DANL	IM
SOUTH,TERRY A	FP
SOWA,ELIZABETH LEE CLARK	OPH
SOWA,RONALD W	ORS
SPAHN,JAMES GABRIEL	OTO
SPAIN,W THOS	OBG
SPEAR,ROBERT K	IM
SPRECHER,HERMAN C	CRS
STALLINGS,HUGH ALOYSIUS	OBG
STAMPS,THOS EDWARD	IM
STEINER,GREGORY E	FP
STERNE,JOHN HOWARD	ORS
STEWART,L RAY	R
STOLLER,LEON JUSTUS	OBG
STRANSKY,THEODORE J	OPH
SWANSON,RICHARD THOS	IM
TALLEY,TERRY WAYNE	OPH
TELLER,THOMAS F	CLP
TEN BARGE,DAVID PAUL	O
TISSERAND,JOHN B	D
TRIPLETT,WILLIAM B	A
TUHOLSKI,JAMES MARTIN	PD
TWEEDALL,DANL CODY	D
ULREY,ROBT PAUL	AN
UM,TAI KUN	IM
UNDERHILL,GARY EUGENE	PD
VENABLES,ALBERT J	PTH
VIBUL,SANTI	TS
VINCENT,WM ADAM	IM
VONDER HAAR,THOS E	IM
WADDELL,J RONALD	GS
WAECHTER,FRANK EDWARD	OBG
WAGNER,RICHARD A	FP
WALTER,ROBT FREDERICK	FP
WAYNE,LISLE	PS
WEBER,EDGAR HARTMETZ	OM
WEBER,EMIL LEE	NS
WELBORN,MELL B	GS
WELBORN,MELL BURRESS	TS
WHITE,THOS ROGER	CD
WILHELMUS,C KENNETH	OM
WILHELMUS,GILBERT M	FP
WILLIAMS,BRUCE	PD
WILLIAMS,JACK OWEN	IM
WILLIS,CHAS FLEMING	FP
WILLISON,GEO WYMAN	IM
WILLKE,THOMAS	FP
WILSON,DAVID	AN
WILSON,RALPH	FP
WOODALL,ROBT LOUIS	PS
WOODWARD,BEN E	ORS
WOOTEN,MONA F	FP
WOOTEN,WILLIAM GODFREY	FP
YOUNG,CLAUDE CURTIS	OBG
YOUNG,WARREN WILLIAM	OM
ZEIER,FRANCIS G	HS
ZISS,ROBT C	IM
ZIVNUSKA,FREDERICK R	TR
ZWICKEL,RALPH EDWARD	IM

VIGO COUNTY MEDICAL SOCIETY

ACTON,CHAS MICHAEL	D
ALSIKAFI,FADHIL H	GS
ANAS,PANDELI	GS
ANDERSON,WALTER C	GS
AULT,ROY J	OBG
BANNON,WM G	IM
BLOXDORF,JOHN WM	PTH
BLUM,LEON LEIB	PTH
BOPP,HENRY WM	GS
BOPP,JAMES	AN
BOYD,HARVEY CLARK	GYN
BRISTOL,HENRY MARK S	GP
BRONSON,PAUL JONES	OBG
BROWN,DAVID F	FP
BROWN,ROBT RAYMOND	U
BUECHLER,JAMES RAYMOND	FP
BURKLE,ROBERT J	ORS
CACDAC,FE JOSON	FP
CACDAC,MANUEL ARCE	NS
CAJACOB,MELVILLE EDWARD	FP
CALDWELL,MILTON VICTOR	R
CARPENTER,DONALD JACK	OPH
CAVINS,ALEXANDER W	GYN
CHAU,ANDREW YIU-SUEN	GS
CONKLIN,JAMES OLIVER	GS
CONNERLEY,MARION L	GS
CONWAY,THOS J	PD
CRISTEE,JAMES WARREN	IM
CROCKETT,WAYNE ALBERT	IM
DARROW,GREGORY L	FP
DEPPE,JAMES TIMOTHY	
DRAKE,FRED DUANE	OTO
DRUMMY,WM WALLACE	IM
DYER,GEO WALLACE	FP
EDWARDS,HENRY GRADY	U
EL-ISSA,SA'D ISSA	CO
ENDERLE,FRANK JOHN	GS
ENSEY,PHILIP L	FP
FELICIANO,ADORACION	FP
FELICIANO,MACARIO G	AN
FREED,JOHN ELIAS	GS
GERRISH,DONALD AIKMAN	FP
GOODMAN,HUBERT THORMAN	PH
GREEN,WM DOUGLAS	PD
HASLEM,JOHN ROBT	GS
HERBST,JERRY	U
HODA,ALI	OBG
HOGAN,THOS W	R
HTAIN,MIN	R
HUMPHREY,PAUL EUGENE	U
HUNT,EDGAR JOHN	OS
IMPERIAL,BORIS S	P
JANICKI,DAVID JOHN	IM
JETT,CLYDE W	FP
JOHNSON,PAUL DEWEY	GS
JUSTIN,RENATE G	FP
KEFFER,HARRY LEE	AN
KHO,JAMES B	PTH
KIM,CHANG YOUNG	P
KIM,HWA WOONG	AN
KO,BENNY SIV-PING	R
KONOWITZ,MICHAEL R	R
KRIEBLE,WM WYMONO	IM
KUNKLER,ARNOLD W	GS

VIGO COUNTY MEDICAL SOCIETY

KUNKLER,WM CHAS	GS
KUYKENDALL,GERALD LEE	IM
LAI,EDWARD MING-CHE	PTH
LANCET,ROBT ORVILLE	FP
LENYO,LUDIMERE	IM
LIMCACO,OSCAR GARCIA	NS
LOEWENSTEIN,WERNER L	FP
LOVING,JURY BAKER	FP
MALONE,LEANDER ALONZO	R
MANKIN,WM J	OPH
MANZANARES,AUSTACIO F	AN
MASON,LESTER MILLARD	D
MAYROSE,RICHARD SMITH	FP
MC ALEESE,GED BUCHANAN	GS
MC BRIDE,NOEL SAMUEL	OPH
MC CORMACK,WILLIAM M	R
MC CREA,FRED RONALD	R
MC INTOSH,WILBERT	FP
MC LAUGHLIN,GORDON C	PD
MEISSEL,ROBT LEE	FP
MENKE,WILBER J	FP
MIKLOZEK,JOHN EDMUND	FP
MITRE,ISAAC NAZRI	OBG
MOORE,GENE DOUGLAS	P
MURRAY,JOHN SUMNER	
NEUDORFF,LOUIS GEO	IM
NOROOZI,IRADJ	OBG
NUVAL,AUGUSTO JOSE	AN
PANGAN,JESUS F	IM
PARK,JASON Y S	P
PATEL,DINKER A	FP
PATEL,PULKIT JOITARAM	U
PEARCE,ROY VOYLES	FP
PETERSON,DEWARD D	R
PETIT,JAMES M	P
PICKEREL,JAMES W	OPH
RANEY,ROBT DONALD	IM
REDDY,RAMANA	
REED,ROBT CECIL	AN
REYNOLDS,RICHARD J	IM
RICHART,JAMES VERNON	FP
RIGGS,FLOYD C	FP
ROGERS,ROBT SHIRRELL	FP
ROSEFF,MARTIN H	OTO
ROSENE,HAROLD A	ORS
ROURKE,ROBT F	OBG
SAFAYAN,ESFANDIAR	OTO
SALISBURY,CHAS PARSON	OBG
SANKEY,PEGGY LOU	PTH
SCHERB,BURTON E	OPH
SCHUMAKER,ROBT A	FP
SCULLY,WM EDWARD	PD
SHANKLIN,VERNON A	FP
SHOWALTER,JOHN RALPH	FP
SHRINER,WILLIAM CUPPY	P
SIEBENMORGEN,PAUL	FP
SISON,ROSE DORADO	PD
SISON,VICENTE G	US
STOELTING,J LEWIS	OBG
STRECKER,WM LOUIS	AN
SU,HUEY-JER	CD
SUH,YOUNG SOO	R
TOPPING,MALACHI COMBS	ORS
VEACH,WM L	U
VOGES,EDWARD CARL	FP
WAKIM,KHALIL GEORGES	OS
WANGELIN,RICHARD	OPH
WEBER,JOS G S	R
WEINBAUM,JACK G	PTH
WEST,ROGER FRANK	PD
WHEELER,BYRON CLIFFORD	IM
WILSON,FRED LEE	CD
ZIMMER,HENRY JOHN	OM

WABASH COUNTY MEDICAL SOCIETY

ADAMS,PARKS MADDEN	US
BOAZ,WM DALE	GP
BUNKER,LADOSKA ZEE	GP
DANNACHER,WM DENNIS	ABS
DRAGOO,JOHN ROBT	FP
EILER,PAUL AUSTIN	FP
ELLIS,DAVID LEE	AN
ELWARD,CARL J	R
FERGUSON,PHILIP CHAS	FP
GIFFORD,JOS DEAN	PTH
HANNEKEN,VINCENT JOHN	FP
HAUGHN,JAMES	FP
LA SALLE,RICHARD MAHLON	FP
LA SALLE,ROBT M	FP
LYONS,CHAS ROGER	US
MC ALPINE,RICHARD J	FP
MC FADDEN,WILBUR DEAN	FP
MERNITZ,ROLAND BALDWIN	GS
MOLLABASHY,DJAVAD	AN
PANCHOLY,NAVIN CHIMANLAL	GS
PEARSON,WM EPHRIUM	FP
POEHLER,FREDERICK CHAS	AN
RAUH,ROBT A	FP
SILVERS,L MICHAEL	FP
STEFFEN,JULIUS T	FP
STOOPS,JEAN TODD	FP

WARRICK COUNTY MEDICAL SOCIETY

ALI,SYED A	IM
ASUNCION,LEYTE B	GP
BHATT,KISHOR R	PD
BHATT,PALLAVI K	AN
BYUN,TAI SIK	OBG
CAMACHO,ERNESTO M	FP
CHOE,YOUNG	FP
COLVIN,ROBT CLYDE	FP
DANGANAN,MANUEL S	US
FENOL,HONESTO KIMPO	FP
FOO-CANTO,LOURDES LAI	EM
HOOVER,PETER BOWEN	FP
MARTIN,NOEL JACKSON	EM
QUIROZ,JORGE A	GS
RAMASWAMY,C P	ORS
RUIZ,CARLOS MEDINA	FP
TERRY,ROBT HENRY	FP
WEST,WM G	FP

WASHINGTON COUNTY MEDICAL SOC

APPLE,EDDIE R	GP
CARTY,CHAS BOYD	FP
CASTUERAS,FLOR TAYLAN	FP
LUKINS,JAMES D	FP
MANSHIP,CECIL STANLEY	FP
MARTIN,DONALD LANE	FP
TADATADA,VICTORIANO JOSE	FP
TOWER,THOS KERMIT	CD

WAYNE UNION COUNTY MEDICAL SOC

ADNEY,FRANK BROWN	U

WAYNE UNION COUNTY MEDICAL SOC

AKE,LOREN FRANCIS	GP
ALLEN,ROBT T	OPH
ANG,DOMINGO LIM	IM
ANG,ROSA UY TAN	AN
BARTON,WILLOUGHBY M	FP
BHANGOO,SUKMINDER SINGH	AN
BLOSSOM,PAUL WRIGHT	GP
BRONSON,WILLIAM W	EM
BROWN,RONALD ROBT	IM
BROWNING,CHAS A	AN
BURGE,KELMAR M	D
BURKHART,JAMES EDWARD	N
BUTLER,RICHARD MARKLAND	OR
CABIGAS,JOSE SOVISO	FP
CHMIELEWSKI,STANLEY ROBT	OPH
CLARKSON,CLARENCE G	FP
CLEMENTE,JOSE PERALEJO	FP
COBLE,FRANK HAROLD	OPH
COOKE,JOHN VINCENT	R
COX,LEON THOMPSON	FP
DAGGY,JAMES R	FP
DARROCA,WM CELIS	P
DEHNER,JOHN ROSS	TR
DEITSCH,HOWARD C	FP
DINGLE,PAUL ELLSWORTH	OBS
EBBINGHOUSE,TOM H	FP
FIEDOR,JOHN P	ORS
GIBSON,ALOIS E	ORS
GLOCK,ALAN R	ORS
GUTHRIE,JAMES ROBT	IM
HARMON,CARL JOS	FP
HECKAMAN,EDWARD LENTZ	OS
HIBNER,DAN WM	FP
HILL,PAUL GOODWIN	FP
HINSHAW,MICHAEL ANTHONY	GS
HOLLENBERG,ALFRED E	FP
HUNTEMAN,ROY KEITH	FP
IGNACIO,DOMINADOR GIANAN	OBG
JACKSON,JOHN SCHOOLING	IM
JOHNSON,GEO MARTIN	GS
JOHNSON,JAMES ALLEN	AN
KENYON,CHAS EMIL	FP
KIRACOFE,GEO ROELAND	FP
KREITL,DOROTHY M REEVES	P
LEONARD,DALE FORREST	FP
LEWIS,JAMES RICHARD	IM
LEY,LARRY J	U
LING,JOHN FRANCIS	IM
LOGAN,JAMES ZIMMERMAN	ABS
LOOMIS,CHAS HENRY	GS
MADER,JOHN H	IM
MADER,JON TERRY	ID
MC WILLIAMS,WM BRYAN	FP
MILLER,HAROLD L	ORS
MILLIS,ARTHUR B	PM
PARAISO,ANTONIO QUEVEDO	OBG
PARK,BYRON J	ORS
PENNINGTON,ROBERT	GS
PLASTERER,EDWARD DALE	PD
PORTER,GEO SETH	OBG
QUISUMBING,REMEDIOS E	P
RAMSDELL,GLEN AUSTIN	PUD
RHOADS,PAUL SPOTTSWOOD	IM
RIDER,PAUL STEVEN	PD
RODRIGUEZ,PEDRO CLAVERIA	FP
ROYER,JAMES P	FP
RUNGE,PAUL WM	IM
SAGE,CHAS VICTOR	OS
SHERER,KENNETH E	AN
SHIRAZI KESHAVARZ,E	OTO
SHORT,JOHN A	AN
SNELL,GARY W	FP
SNYDER,MORRIS CLAYTON	FP
SPELLMEYER,JOHN CLAIR	R
SPENCE,WILLIAM CRAIG	
STEPLETON,JOHN DAVID	PTH
STILWELL,WM R	AN
SZYMANPWSKI,JAMES EDWARD	OBG
VILLARIN,ADRIAN V	P
WAMBO,JOHN M	OBG
WARREN,ROBT JOE	PD
WARRICK,FRANCIS B	IM
WEITEMIER,RAYMOND A	PD
WERTENBERGER,MORRIS D	R
WILAND,OLIN K	PTH
WOODMAN,KENNETH S	GS
ZORE,JOS JOHN	PD

WELLS COUNTY MEDICAL SOCIETY

BABCOCK,JAMES LOWELL	ORS
BADER,PATRICIA I ENGLUM	PD
BAKER,PAUL D	AN
BALAMOHAN,RAMALINGAM	CD
BENTZ,JOHN MARVIN	OBG
BOSSARD,JOHN W	NS
BRADLEY,LOUIS FRANCIS	IM
CAYLOR,CHAS H	U
CAYLOR,HAROLD DELOS	GS
CAYLOR,TRUMAN E	U
COLLINS,JACK TEMPEST	CD
COOK,ROBT GIBSON	OTO
DIAN,DONALD AUGUST	P
DORRANCE,THOS OLNEY	PD
EISAMAN,JACK LANGOHR	CD
ERXLEBEN,WALTER OSCAR	IM
GINGERICK,CHAS MARVIN	FP
GITLIN,WM AARON	OM
GRAF,RUSSELL ENOCH	R
HARDIN,WAYNE EMERSON	FP
HUGHES,MICHAEL A	US
IRICK,NEIL EDWIN	IM
JOHNSTON,ROBT L	GE
KEPHART,STEWART BRUCE	OBG
KEYE,WILLIAM R	OBG
KINZER,LE ROY DE TRUDE	FP
LOHMULLER,HERBERT W	IM
LUZIETTI,RICHARD GILBERT	IM
MATZEN,RICHARD NORMAN	PUD
MAYOCK,PETER PAUL	D
MEIER,DONALD W	GS
MERKLE,GEO WALLACE	FP
MILLER,GERALD LE ROY	FP
MOCK,LAWRENCE FARRELL	ORS
MUDRONY-SZOKE,JENO B	R
NELSON,DELBERT WM	FP
PANOS,CONSTANTINE GEO	FP
PIETZ,DAVID GEO	GE
PITTS,NEAL CHASE	RHU
PROUGH,WENDELL ARTHUR	OPH
PURCELL,LAWRENCE T	U
RUDY,DONALD BYRON	FP
RUMANA,ROBT HENRY	IM
SHAW,GLENN ROBT	OBG
SHINN,GLORIA LOU	GS
SMITH,H CHAS	PD
STALEY,HARRY L	IM
STECKBECK,ROBT LEE	AN
STEVENS,ADAM CHAS	R
STREHLER,DON ALLEN	PD
TALBERT,PIERRE CARL	GS
UMPHREY,JAMES E	END

WELLS COUNTY MEDICAL SOCIETY

VILLAMIL,RAMON J	IM
WAKSMAN,ALBERTO	PTH
WANNER,LOREN J	OBG
YODER,RICHARD PHILIP	IM

WHITE COUNTY MEDICAL SOCIETY

CRABBE-FORBES,VIOLET M	FP
DICKERSON,W MARTIN	EM
FIELDS,MAX L	FP
HIBNER,NOLAN ALBERT	FP
JEHANYAR,MOHAMED ALI	FP
MORRIS,WARREN VICTOR	FP
VAN KIRK,PAUL PHILLIP	OS

WHITLEY COUNTY MEDICAL SOCIETY

HAMILTON,THOS G	FP
HERITIER,CLAUDE J	FP
LEHMBERG,OTTO F C	FP
MISHLER,JOE BILL	FP
REID,DONALD BRAIDWOOD	FP
ROTH,JAMES ROBT	FP
STALTER,GAYLORD W	US
VOGEL,JOHN L	IM
WAIT,JEROME HERSHAL	FP
WILSON,JOHN SMITH	FP
YODER,DEWEY DWAYNE	OPH

HONORARY MEMBERS

Stefan Ansbacher, ScD., Delray Beach, FL
Arthur G. Loftin, Indianapolis
Larry L. Pickering, Fort Wayne
Paul S. Rhoads, M.D., Richmond
Robert J. Amick, Scottsburg
John B. Twyman, Merrillville
James A. Waggener, Indianapolis

INDIANA SOCIETY, MEDICAL SERVICE REPRESENTATIVES

INDIANAPOLIS CHAPTER

1979 ROSTER

OFFICERS: 1979

President	Keith Gates
Vice President	Jim Bova
Secretary	Rich Vaughan
Treasurer	Wanda Farrell

ABBOTT LABORATORIES, INC.			
Richard D. Conwell	1337 N. Gibson Ave.	46219	898-7559
James P. Smith	P.O. Box 257, Carmel	46032	846-2450
ARMOUR PHARMACEUTICAL			
Spencer Johnson, Jr.	1522 St. Johns Ct., Beech Grove	46107	787-6739
ASTRA PHARMACEUTICAL			
Charles W. Hespell	3101 Osceola Lane	46236	894-4636
BEECHAM LABORATORIES			
Paul Drew	2601 Kessler Blvd. E. Dr.	46220	259-8031
Phyllis South	1147 Canterbury Sq. South	46260	253-9576
BOEHINGER INGELHEIM, LTD.			
Faye Durham	7536-A Sand Point	46240	259-1960
BRISTOL LABORATORIES			
Ron Fritz	317 Heather Dr., Carmel	46032	844-6068
David A. Powell	7959 Campbell	46250	842-3907
CARNRICK LABORATORIES			
Gary Jenkins	4069 Westover Dr.	46268	293-7086
CENTURY LABORATORIES, INC.			
Ross Deardorff	3505 E. 62nd	46220	251-4602
CIBA PHARMACEUTICAL CORP.			
Walt H. Cory	5231 E. 77th St.	46250	849-0208
DOME LABORATORIES			
Bob Swift	1325 W. Main St., Carmel	46032	846-5540
ENDO LABORATORIES, INC.			
Les Nagley	6660 E. Ninth St.	46219	356-4398
Charles Sutton	320 Winding Way, Carmel	46032	846-5000
FISONS CORPORATION			
John A. Floren	8830 Washington Blvd. W. Dr.	46240	844-7686
GEIGY PHARMACEUTICALS			
Mark P. O'Conner, R.Ph.	5432 West Wind Lane, Apt. 2B	46250	842-4275
HOECHST PHARMACEUTICALS			
Bill Parker	222 N. Jackson Apt. #1, Greensburg	47240	812-663-5257
Pat Pickett	649 Sunset Dr., Noblesville	46060	773-4310
Roger Snow	2411 K, Bedford	47421	812-275-6670
Sherri Valdes	6454 Derwyn Court	46256	842-0482
Chuck Wincel	145 South Lane, New Whiteland	46184	535-4008
IVES LABORATORIES, INC.			
Robert Gran	105 E. Edgewood Ave.	46227	784-8915
LEDERLE LABORATORIES			
Keith D. Gates	8808 Saville Rd., Noblesville	46060	773-3567
Ned B. Hugus	127 W. 111th St., Carmel	46032	846-5474

MALLARD, INC.			
Homer Surprenant	941 Mellwood Dr.	46217	888-9661
Allen Hauser	R.R. 6, Sylvan Manor, Valparaiso	46383	219-464-2309
MEAD JOHNSON LABORATORIES			
Don Beegle	5916 Cape Cod Court	46250	849-3060
Howard Johnson, Jr.	6829 N. Oxford	46220	259-4637
Glen F. Kesler	725 Greyhound Pass, Carmel	46032	846-4608
C. Chris Northcott	37 Westwind Dr., R.R. #3, Plainfield	46168	839-8339
Rick Smith	3901 Glencairn Lane	46226	546-1848
McGAW			
Jim Thomas	620 Horton Place, Greenwood	46142	888-5135
McNEIL			
Charles T. Love	5565 N. Delaware	46220	257-1934
Michael L. Walsman	31 Ridge Ct., Greenwood	46142	888-1206
MERCK SHARP & DOHME			
Don C. Abbitt	R.R. #1, Box 147 A, Zionsville	46077	873-5908
Henry Pahlke	8311 Rumford Rd.	46219	898-7722
H. Duane Koon	12102 Somerset Way E, Carmel	46032	844-5871
MILEX PRODUCTS, INC.			
James E. Eickhoff	1417 Central Ave., Connersville	47331	825-4267
MODERN DRUGS, INC.			
Ken Hoy, Sr.	1139 Reid Place	46203	632-7148
Ken Hoy, Jr.	1139 Reid Place	46203	632-7148
ORTHO PHARMACEUTICAL CORP.			
Larry Clifton	1311 S. Center, Terre Haute	47802	812-234-4553
Mike Yeager	2841 A Ellago N. Dr.	46227	786-3504
Trudy James	4014 B Monaco Dr.	46220	255-1274
Bill McKimmie	13228 Lantern Rd., Noblesville	46060	542-8742
PARKE DAVIS CO.			
Albert H. Griffin	6847 Balfour Ct.	46220	842-0236
Frank A. McCabe	170 N. 8th St., Zionsville	46077	873-4028
PENNWALT PHARMACEUTICAL			
J. Thomas Frank	7212 Brompton Ct.	46250	849-5333
WM. H. RORER, INC.			
James A. Bova	3040 Marquette Ct.	46268	291-8081
Tim Mojzik	2123 Suffolk Lane	46260	297-2686
SANDOZ PHARMACEUTICALS			
Mike D. Brumback	R.R. #2, Box 114, Alexandria	46001	642-1639
SCHERING CORPORATION			
Philip K. Cradick	2515 E. 99th St.	46280	846-0553
Rollan (Buzz) Perry	2707 Constellation Dr.	46229	898-8481
SEARLE LABORATORIES			
Wanda Farrell	4722 Guion Rd.	46254	293-6589
Craig King	5755 San Clemente Dr.	46226	542-8335
Deloris McDuffee	10352 Rugby Ct.	46280	844-9724
John T. Mullin, II	915 E. 56th St.	46220	257-9566
SMITH KLINE & FRENCH			
Ed Porter	915 Chevy Chase Lane	46280	846-2459
USV PHARMACEUTICALS			
John E. Porter	3040 Barnard St.	46268	293-2799
UPJOHN CO.			
Theodore Rivers	7611 Mohawk Dr.	46260	253-7700
WESTWOOD PHARMACEUTICALS			
Rich Vaughan	3335 Breckenridge Dr.	46208	291-8339

THE INDIANA STATE MEDICAL ASSOCIATION

3935 N. Meridian, Indianapolis 46208—Telephone 925-7545

1979 Annual Meeting—Oct. 13-17—Indianapolis

OFFICERS FOR 1978-79

President—Arvine G. Papplewell, 3530 S. Keystone, Indianapolis 46227

Treasurer—Joseph F. Ferraro, 111 S. Water St., Franklin 46131

Assistant Treasurer—Douglas H. White, 3524 N. Meridian, Indianapolis 46208

Executive Committee—Paul W. Haltzman, Chairman; Arvine G. Papplewell, Joseph F. Ferrara, Douglas H. White, John W. Beeler, Eli Gaadman, Alvin J. Haley, Members

Speaker of the House—Lloyd L. Hill, 302 N. Duke St., Peru 46970

Vice Speaker—Lawrence E. Allen, 2009 Brown St., Anderson

Executive Director—Mr. Donald F. Fay

TRUSTEES

District	Term Expires
1—John A. Bizal, Evansville	Oct. 1980
2—Harold M. Manifold, Bloomington	Oct. 1981
3—Thomas A. Neathamer, Jeffersonville	Oct. 1979
4—Howord C. Jackson, Madison	Oct. 1980
5—Paul Siebenmargen, Terre Haute	Oct. 1981
6—Davis W. Ellis, Rushville	Oct. 1979
7—Donald C. McCallum, Indianapolis	Oct. 1980
7—John G. Pantzer, Indianopolis	Oct. 1981
8—Jock M. Walker, Muncie	Oct. 1981
9—John A. Knote, Lafayette	Oct. 1979
10—Martin J. O'Neill, Valparaiso	Oct. 1980
11—Herbert C. Khalouf, Morian	Oct. 1981
12—Alvin J. Haley, Fort Wayne (Chairman)	Oct. 1979
13—Donold S. Chamberloin, South Bend	Oct. 1980

ALTERNATES

District	Term Expires
1—E. DeVerre Gourieux, Evansville	Oct. 1979
2—Edgar R. Cantwell, Vincennes	Oct. 1980
3—Richard G. Huber, Bedford	Oct. 1980
4—Mork M. Bevers, Seymour	Oct. 1979
5—William G. Bonnon, Terre Haute	Oct. 1979
6—Dan W. Hibner, Richmand	Oct. 1981
7—I. E. Michoel, Indianopolis	Oct. 1979
7—Gerald J. Kurlonder, Indianapolis	Oct. 1979
8—Ted S. Doles, Middletown	Oct. 1979
9—Max N. Hoffman, Covington	Oct. 1980
10—Leonard W. Neol, Munster	Oct. 1981
11—Fred C. Poehler, La Fontaine	Oct. 1980
12—Fronklin A. Bryan, Fort Wayne	Oct. 1980
13—John W. Luce, Michigan City	Oct. 1979

SECTION OFFICERS 1978-79

Sectian an Surgery
Chairman—Danald M. Schlegel, Indianapalis
Secretary—Ted W. Grisell, Carmel

Sectian an Internal Medicine
President—Douglas H. White, Indianapolis
Secy-Treasurer—William Bostnagel, Indionapolis

Section on Family Practice
Chairmon—Bernard J. Emkes, Indianapolis
Secretary—Edwin E. Stumpf, New Haven

Section an Neuralogical Surgery
Chairman—Louis W. Conway, Lafayette
Secretory—Daniel F. Cooper, Indianopolis

Section an Ophthalmalogy and Otalaryngology
Chairman—John Bizal, Evansville
Secretary—Daniel R. Evans, Valparoiso

Section an Anesthesialogy
Chairman—Rabert K. Staelting, Indianapalis
Secretary—Dean L. Strycker, South Bend

Sectian an Public Health and Preventive Medicine
Chairman—Robert K. McKechnie, Jeffersonville
Secretory—David J. Edwards, Indionapalis

Section an Radialogy
Chairmon—William J. Miller, Lafoyette
Secretary—Wallace S. Tirmon, South Bend

Section an Nervaus and Mental Diseases
Chairman—Philip M. Morton, Indianopolis
Secretary—Jeffrey J. Kellams, Indianopolis

Sectian an Pathalogy and Farensic Medicine
Chairman—David E. Smith, Indianapalis
Secretary—Emmett C. Pierce, Greenfield

Sectian on Pediatrics
Chairman—Robert Hannemann, Lafoyette
Secretary—Stephen Bash, Fort Wayne

Sectian an Directars af Medical Educatian
Chairman—Borbara Backer, LoPorte
Secretary—Robert Chevalier, Beech Grave

Section on Cutoneous Medicine
Chairman—Wm. J. Cran, Blaomington
Secretary—Ronald H. Doneff, Gary

Section on Allergy
Chairmon—Paul D. Isenberg, Indianopolis
Secretory—Beouford Spencer, Bloomington

Section on Uralagy
Chairman—David Schlueter, Fort Wayne
Secretary—

Sectian an Orthapedic Surgery
Chairman—Frank B. Thraap, Indianapalis
Secretary—Marris S. Friedman, South Bend

Section on Emergency Medicine
Chairmon—John C. Johnson, Brownsburg
Secretory—Esther Schubert, New Castle

DELEGATES TO THE AMA

Terms expire December 31, 1980:
Delegates: Geargе T. Lukemeyer, Indianapolis; Malcolm O. Scamaharn, Pittsbaro; Rass L. Egger, Daleville.
Alternates: Rabert M. Seibel, Nashville; Everett E. Bickers, Floyds Knabs; Gilbert M. Wilhelmus, Evansville.

Terms expire December 31, 1979:
Delegates: Patrick J. V. Corcaran, Evansville; Peter R. Petrich, Attica.
Alternates: Thomas C. Tyrrell, Hammand; Marvin E. Priddy, Fart Wayne.

DISTRICT MEDICAL SOCIETY OFFICERS

District	President	Secretary	Place, Dote af Meeting
1.	Forrest Radcliff, Evansville	William R. Wells, Princeton	May 17, 1979, Evansville
2.	Joe Dukes, Dugger	James P. Beck, Washingtan	Oct. 4, 1979, Dugger
3.	John M. Paris, New Albany	Charles C. McCalla, Paali	April 21-22, Clarksville
4.	Brocktan L. Weisenberger, Columbus	John I. Cooper, Madison	May 9, 1979, Columbus
5.	J. B. Ko, Terre Houte	Clyde Jett, Seelyville	May 30, 1979, Terre Haute
6.	Hal R. Rhynearson, Fortville	Douglas Morrell, Rushville	May 2, 1979, Rushville
7.	Stephen L. Hardin, Martinsville	M. O. Scomaharn, Pittsbara	May 23, 1979, Martinsville
8.	George A. Donnally, Geneva	Eugene M. Gillium, Portland	June 13, 1979
9.	Adrian Lanning, Noblesville	John A. Knote, Lafayette	June 14, 1979
10.	Lee H. Trachtenberg, Munster	Barron M. F. Palmer, Hammand	June 6, 1979, Hobart
11.	Thomas R. Scherschel, Kakomo	Frederick C. Poehler, La Fontaine	Sept. 19, 1979, Kokomo
12.	Michael O. Mellinger, LoGronge	Robert H. Musselman, Fort Wayne	Sept. 13, 1979
13.	William A. Stark, Mishawaka	Michael G. Quinn, South Bend	Sept. 12, 1979, Michigon City

COUNTY MEDICAL SOCIETY DIRECTORY

County	President	Secretary
Adams	John E. Doan, Decatur	Hyung Soo T. Lee, 227 S. Second St., Decatur 46733
Allen (Fort Wayne)	Jerald L. Andrew, Fort Wayne	Robert W. Dettmer, 2B2B Fairfield Ave., Fort Wayne 46806
		Mr. Larry L. Pickering, Exec. Dir., 212 Med. Ctr. Bldg., Fort Wayne
Bartholomew-Brown	Robert G. Reed, Columbus	Stanley R. Adkins, 3B0 Plaza Drive #D, Columbus 47201
Benton	A. L. Coddens, Earl Park	Manley K. Scheurich, R.R. 1, Oxford 47971
Boone	Donald Boyer, Lebanon	John J. Saalwaechter, 404 W. Camp St., Lebanon 46052
Carroll	Stephen C. Mayers, Flora	Robert Seese, 101 W. North St., Delphi
Cass	Joseph Howard, Logansport	Carl R. Boyd, 2 Chase Park, Logansport 46947
Clark	Joselito Millan, Jeffersonville	Jerrold E. Tomlin, 1220 Spring St., Jeffersonville 47130
Clay	Robert C. Oehler, Brazil	E. L. Conrad, 1207 E. National Ave., Brazil
Clinton	Milton Erdel, Frankfort	William R. Stapleton, 1256 S. Jackson, Frankfort 46041
Daviess-Martin	Marshall Seat, Washington	James P. Beck, 1312 Bedford Rd., Washington 47501
Dearborn-Ohio	Henry Conrad, Lawrenceburg	Gerald T. Bowen, 705 Tanner Ave., Lawrenceburg 47025
Decatur	Gene P. Gebele, Greensburg	Arnold D. Ducanes, 215 N. Franklin St., Greensburg 47240
DeKalb	John C. Horvey, Auburn	Harland V. Hippensteel, 20B W. 7th St., Auburn 46706
Delaware-Blackford	Arthur C. Jay, Parker	Chas. J. Leiphart, 2311 W. Jackson St., Muncie 47305
Dubois	Allen D. Scales, Huntingburg	Robert Bretz, St. Joseph Hospital, Huntingburg 47542
Elkhart	James D. Finfrock, Elkhart	Page E. Spray, 320 W. High St., Elkhart
Fayette-Franklin	Joseph L. Steinem, Connersville	Kirit T. Patel, 1941 Virginia Ave., Connersville 47331
Floyd	William V. Croft, New Albany	Daniel H. Cannon, 1201 E. Spring St., New Albany
Fountain-Warren	Hugh C. Brenner, Williamsport	Theodore Person, 601 N. Mill St., Veedersburg
Fulton	James P. Schalliol, Rochester	Joseph D. Richardson, 121 West 8th St., Rochester 46975
Gibson	James F. Peck, Princeton	R. E. Weitzel, 114 S. Hart, Princeton 47670
Grant	L. J. Wojcik, Marion	E. S. Rifner, Van Buren
Greene	Robert Moses, Worthington	Harry Rotman, Jasonville
Hamilton	A. Adrian Lanning, Noblesville	Paul M. Waitt, 450 Lafayette Rd., Noblesville 46060
Hancock	Gary C. Sharp, Greenfield	Harry T. Hensley, 11929 E. 65th St., Oaklandon 46236
Harrison-Crawford	Louis M. Blessinger, Corydan	Carl E. Dillman, Beaver & Oak St., Corydon 47112
Hendricks	Joseph Kerlin, Danville	Wm. A. Edwards, 1655 Hawthorn Dr., Plainfield 46168
Henry	David Cain, New Castle	Donald E. Vivian, Henry Co. Hospital, New Castle 47362
Howard	G. M. Reul, Kokomo	Donald L. Fields, 3B04 Southland Ave., Kokoma 46901
Huntington	William J. Webb, Huntington	Piyush J. Shah, 1159 Etna Ave., Huntington 46750
Jackson	Mark M. Bevers, Seymour	Joel M. McGill, 213 E. Cross St., Brownstown 47220
Jasper	Michael Louck, Rensselaer	Francis E. O'Brien, Washington St., Rensselaer 47978
Jay	James S. Fitzpatrick, Portland	Joseph F. Vormohr, 604 W. Arch St., Portland 47371
Jefferson-Switzerland	Elton Heaton, Madison	Ott B. McAtee, Madison State Hospital, Madison
Jennings	James L. Calli, North Vernan	F. Richard Walton, 311 Henry St., North Vernon 47265
Johnson	Steven A. Weber, Franklin	Chandrabhan Singh, Johnson Co. Memorial Hospital, Franklin 46131
Knox	James A. Koontz, Vincennes	Jay R. Tuttle, 14 S. Third St., Vincennes 47591
Kosciusko	David W. Haines, Warsaw	George A. Ros, 827 S. Union St., Warsaw 46580
LaGrange	Millard R. Taylor, Howe	Evan C. Thompson, P.O. Box 217, Topeka 46571
Lake	Thomas A. Gehring, Merrillville	Mary E. Carroll, 124 N. Main St., Crown Point 46307
		Mr. John B. Twyman, Ex. Dir., 66B5 Broadway, Merrillville 46410
LaPorte	Donald L. Weninger, Michigan City	King S. Jones, P.O. Box 3B3, Michigan City 46360
		Orville A. Schumm, Exec. Dir., 110 South Ave., La Parte 46350
Lawrence	Gerald E. Kasting, Bedford	Gareth A. Morgon, 161B—24th St., Bedford 47421
Madison	Kenneth E. Schemmer, Andersan	John D. Jones, 1719 N. Madison Ave., Anderson 46012
Marion	John D. MacDougall, Indianapolis	H. Marshall Truster, 1144 Consolidated Bldg., Indianapolis 46204
		Mr. Harold W. Hefner, Exec. Dir., 211 N. Delaware St., Indianapolis 46204
Marshall	Michael F. Deery, Culver	Byron Holm, 304 N. Walnut, Plymouth 46563
Miami	Maurice Sixbey, Denver	A. L. Baluyut, 29 E. Main, Peru 46970
Montgomery	Fred P. Warbinton, Crawfordsville	Jack L. Foltz, 1407 Darlington Ave., Crawfordsville 47933
Morgan	O. R. Wilson, Morgantown	Stephen L. Hardin, 171 E. Washington St., Martinville 46151
Newton	R. S. Jardenil, Kentland	E. L. Gamba, Lake Village 46349
Noble	John E. Ramsey, Kendallville	Carl F. Stallman, R.R. 3, Kendallville 46755
Orange	Charles X. McCalla, Paoli	Philip T. Hodgin, Orleans
Owen-Monroe	William R. Anderson, Bloomington	Mark Wisen, 619 W. First, Bloomington 47401
		Arlene Rhea, Exec. Secy, 1920 E. Third St., Bloomington 47401
Parke-Vermillion	George Alexandrescu, Clinton	J. Franklin Swaim, P.O. Box 1B5, Rockville 47872
Perry	Robert Gilbert, Tell City	Robert A. Ward, Professional Bldg., Tell City
Pike	Donold L. Hall, Petersburg	Donald L. Hall, 7th and Paplar, Petersburg 47567
Porter	Charles Griffin, Valparaiso	Owen H. Lucas, 700 S. Calumet Road, Chesterton 46304
Posey	Harold E. Ropp, New Harmony	Herman Hirsch, 130 W. 5th St., Mt. Vernon
Pulaski	Harold J. Holleck, Winamac	William R. Thampson, 111 N. Monticello St., Winamac 46996
Putnam	Fred Haggerty, Greencastle	F. R. Dettloff, 407 Melrose Ave., Greencastle 46135
Randolph	Jerome M. Leahey, Union City	C. R. Miranda, 702 Browne St., Winchester 47394
Ripley	Manuel G. Garcia, Batesville	Thomas E. LeBeau, Margaret Mary Hospital, Batesville 47006
Rush	Davis W. Ellis, Rushville	Harry G. McKee, 20B W. First St., Rushville 46173
St. Joseph	Richard Schaphorst, Mishawaka	Richard Buck, 51916 U.S. 31 North, South Bend 46615
		Mrs. Rose Vance, Exec. Secy., 2015 Western Ave., South Bend 46629
Scott	Benjamin V. Roberto, Austin	Manuel T. Dancel, 675 N. Gardner St., Scottsburg 47170
Shelby	Lucian A. Arata, Shelbyville	Dar Muceno, 103 W. Washington, Shelbyville 46176
Spencer	Michael O. Monar, Rockport	John C. Glackman, Jr., Rackpart
Starke	Walter Fritz, Knox	Earl Leinbach, Hamlet
Steuben	Donald Mason, Angola	K. L. Kissinger, 411 E. Eilmore St., Angola 46703
Sullivan	John R. Taylor, Palestine	Joe Dukes, South Third St., Dugger 47848
Tippecanoe	Barbara J. Bourland, W. Lafayette	Robert Williamson, c/o 2424 Ferry St., Lafayette 47904
Tipton	Destroy W. Lambert, Tipton	George L. Compton, 219 N. Independence, Tipton 46072
Vanderburgh	Wallace M. Adye, Evansville	Mrs. Carole Rust, Exec. Dir., 421 N. Main St., Evansville 47711
Vigo	Tom J. Conway, Terre Haute	James W. Cristee, 400 8th Ave., Terre Haute 47804
		William L. Purcell, Exec. Secy., P.O. Box 9B6, Terre Haute
Wabash	Charles R. Lyons, Wabash	Parks M. Adams, Jr., 1103 N. Wayne St., N. Manchester 46962
Warrick	Robert C. Calvin, Newburgh	Wm. G. West, Jr., P.O. Box 558, Newburgh 47630
Washington	Charles B. Carty, Pekin	Thomas R. Northcott, 102 N. Harrison, Salem 47167
Wayne-Unian	William R. Stilwell, Richmond	Bryan Park, 13B0 Chester Blvd., Richmond 47374
Wells	Louis F. Bradley, Bluffton	James E. Umphrey, 303 S. Main St., Bluffton 46714
White	Nolan A. Hibner, Monticello	Paul P. VanKirk, 105 W. Washington St., Monticello 47960
Whitley	Claude J. Heritier, Columbia City	John Vogel, 215 E. Van Buren, Columbia City 46725

ISMA Committees and Commissions

COMMITTEES

EXECUTIVE
Paul W. Holtzman, Bloomington, chairman; Arvine G. Popplewell, Indianapolis, president; Joseph F. Ferrara, Franklin, treasurer; Douglas H. White, Indianapolis, assistant treasurer; Alvin J. Haley, Fort Wayne, chairman of the Board of Trustees; Eli Goodman, Charlestown, immediate past president; John Beeler, Indianapolis, at large.

FUTURE PLANNING
Peter R. Petrich, chairman; Stanley M. Chernish, Indianapolis; Vincent J. Santare, Munster; Jack Shanklin, Vincennes; E. Henry Lamkin, Indianapolis.

MEDICAL EDUCATION FUND
Donald E. Wood, Indianapolis, chairman; J. O. Ritchey, Indianapolis; John W. Beeler, Indianapolis; Joe E. Dukes, Dugger; Jack M. Lockhart, Connersville.

GRIEVANCE
G. Beach Gattman, chairman, Elkhart; George T. Lukemeyer, Indianapolis.

MEDICO-LEGAL
John W. Beeler, Indianapolis, chairman.

NEGOTIATIONS
Alvin J. Haley, Fort Wayne, chairman; John W. Beeler, Indianapolis; Leonard W. Neal, Munster; Donald C. McCallum, Indianapolis; Herbert C. Khalouf, Marion.

IMPAIRED PHYSICIAN
Gerald P. Johnston, Indianapolis, chairman; Richard W. Campbell, Indianapolis; Wallace R. VanDenBosch, Lafayette; Thomas E. Lunsford, Indianapolis.

COMMISSIONS

CONSTITUTION AND BYLAWS
Lester H. Hoyt, Indianapolis, chairman; Thomas Kandul, Evansville; Russell Dukes, Bloomington; Claude J. Meyer, Jeffersonville; Henry Conrad, Lawrenceburg; Warren Macy, Greencastle; C. G. Clarkson, Richmond; Loren H. Martin, Indianapolis; Wallace A. Scea, Elwood; John J. Saalwaechter, Lebanon; Frank Moxley Sturdevant, Valparaiso; Robert M. Brown, Marion; William R. Clark, Sr., Fort Wayne; John B. Guttman, Wakarusa.

CONVENTION ARRANGEMENTS
Stanley M. Chernish, Indianapolis, chairman; Eugene Austin, Evansville; James N. Topolgus, Bloomington; Richard McIlroy; Columbus; Fred Haggerty, Greencastle; James Johnson, Richmond; Thomas Alley, Indianapolis; Clarence Ashburn, Muncie; Max Hoffman, Covington; Daniel T. Ramker, Hammond; Shirley T. Khalouf, Muncie; T. A. Felger, Fort Wayne; Thomas A. Neathamer, Jeffersonville; Edward C. Wheeler, Indianapolis; John O. Hildebrand, South Bend; Garry L. Bolinger, Indianapolis.

LEGISLATION
Richard L. Reedy, Yorktown, chairman; L. Ray Stewart, Evansville; Paul J. Wenzler, Bloomington; Peter H. Livingston, Bedford; Edward L. Probst, Columbus; William Strecker, Terre Haute; Kenneth Woodman, Richmond; Martin Fundenberger, Indianapolis; Dennis Nicholas, Indianapolis; Leonard W. Neal, Munster; Tom Scherschel, Kokomo; Jerry Stucky, Fort Wayne; Robert M. Sweeny, South Bend; Paul Muller, Indianapolis; Dean Grove, Indianapolis; Malcolm O. Scamahorn, Pittsboro; John A. Knote, Lafayette.

PUBLIC RELATIONS
Marvin Priddy, Fort Wayne, chairman; Albert S. Ritz, Evansville; Thomas O. Middleton, Bloomington; Frank P. Lloyd, Indianapolis; Robert P. Acher, Greensburg; Greg Larkin, Greencastle; Ralph Lewis Rea, Greenfield; Richard Jordan, Corydon; John Osborne, Muncie; Kenneth J. Ahler, Rensselaer; Charles D. Egnatz, Schererville; Richard Glendening, Logansport; Logan Dunlap, South Bend; Harry G. Becker, Indianapolis; Ross Egger, Daleville

MEDICAL EDUCATION
Steven C. Beering, Indianapolis, chairman; Charles Hachmeister, Evansville; David A. Byrne, Bloomington; Richard Riehl, Jeffersonville; Brockton Weisenberger, Columbus; Cleon Schauwecker, Greencastle; James R. Lewis, Richmond; Hunter Soper, Indianapolis; Eugene Gillum, Portland; T. Neal Petry, Delphi; Rex Joseph, Indianapolis; Shokri Radpour, Kokomo; Ronald Scheeringa, Fort Wayne; Wallace S. Tirman, Mishawaka; Thomas A. Gehring, Merrillville; Franklin A. Bryan, Fort Wayne; John R. Mader, Richmond; John F. Phillips, Indianapolis; John Roscoe, Indianapolis.

MEDICAL SERVICES
H. Marshall Trusler, Indianapolis, chairman; Wallace Adye, Jr., Evansville; Donald D. Cofield, Bloomington; Everett E. Bickers, Floyds Knobs; H. S. Riley, Madison; Paul E. Humphrey, Terre Haute; Joseph L. Steinem, Connersville; Albert Donato, Indianapolis; John MacDougall, Indianapolis; Theodore R. Hayes, Muncie; Carl Bruce Howland, Crawfordsville; R. James Bills, Gary; Regino B. Urgena, Marion; R. Wyatt Weaver, Angola; Jack Hannah, Elkhart; Charles Aust, Ft. Wayne.

Ad Hoc Committees

IMMUNIZATION
Robert Parr, Indianapolis, chairman

DATA PROCESSING
James H. Gosman, Indianapolis, chairman

ORDERING INFORMATION

The 1979 Membership Roster is published as a Supplement to the March issue of The Journal. It is printed from information carried on the computerized Master File of the Indiana State Medical Association.

Additional copies: Send check with order to The Journal, Indiana State Medical Association, 3935 N. Meridian St., Indianapolis, Ind. 46208. Single copies to members, $5; all others, $15. Checks should be made payable to the Indiana State Medical Association.

116515

UC San Francisco LIBRARY
UNIVERSITY OF CALIFORNIA · UNIVERSITY OF CALIFORNIA

00433957

3 1378 00433 9571